

Figure 1

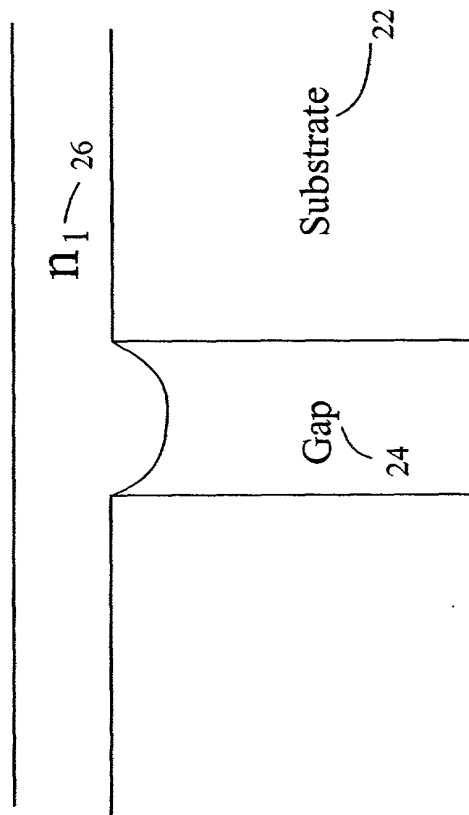


Figure 2

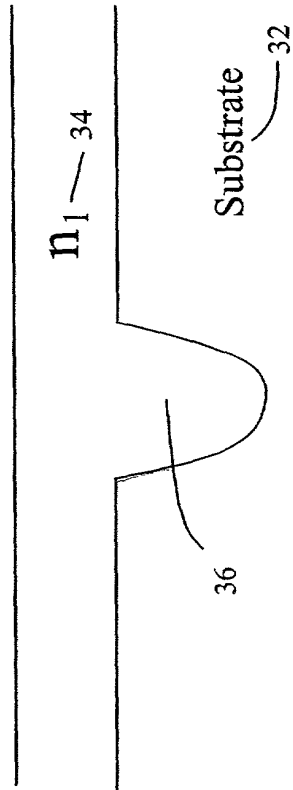


Figure 3

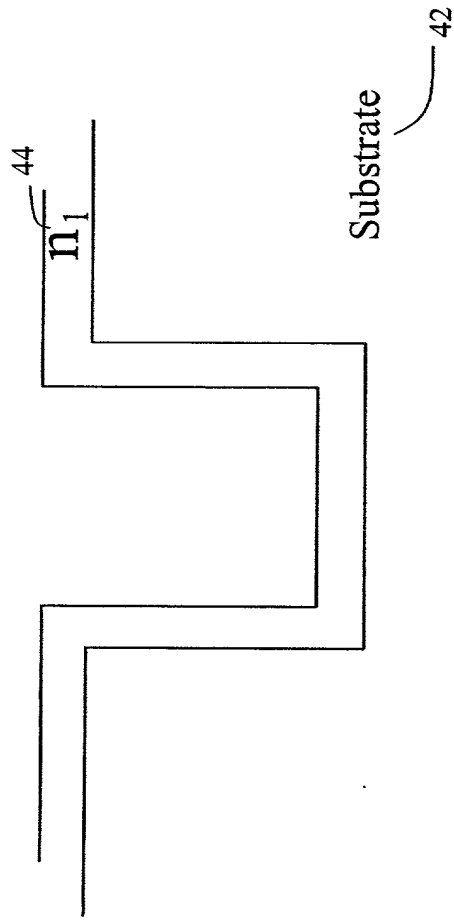
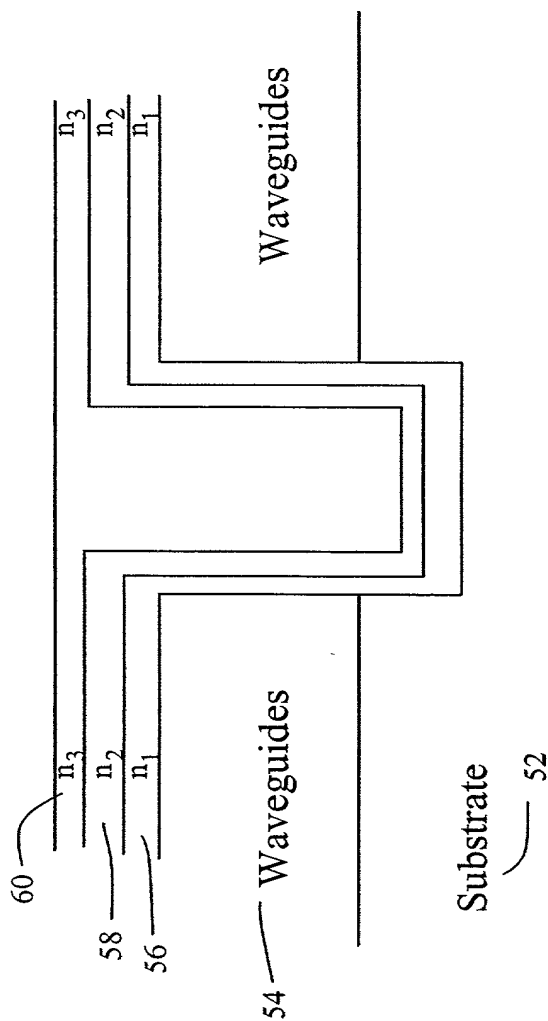


Figure 4

50

Thin film filter



Guided wave thin film filters

Figure 5A

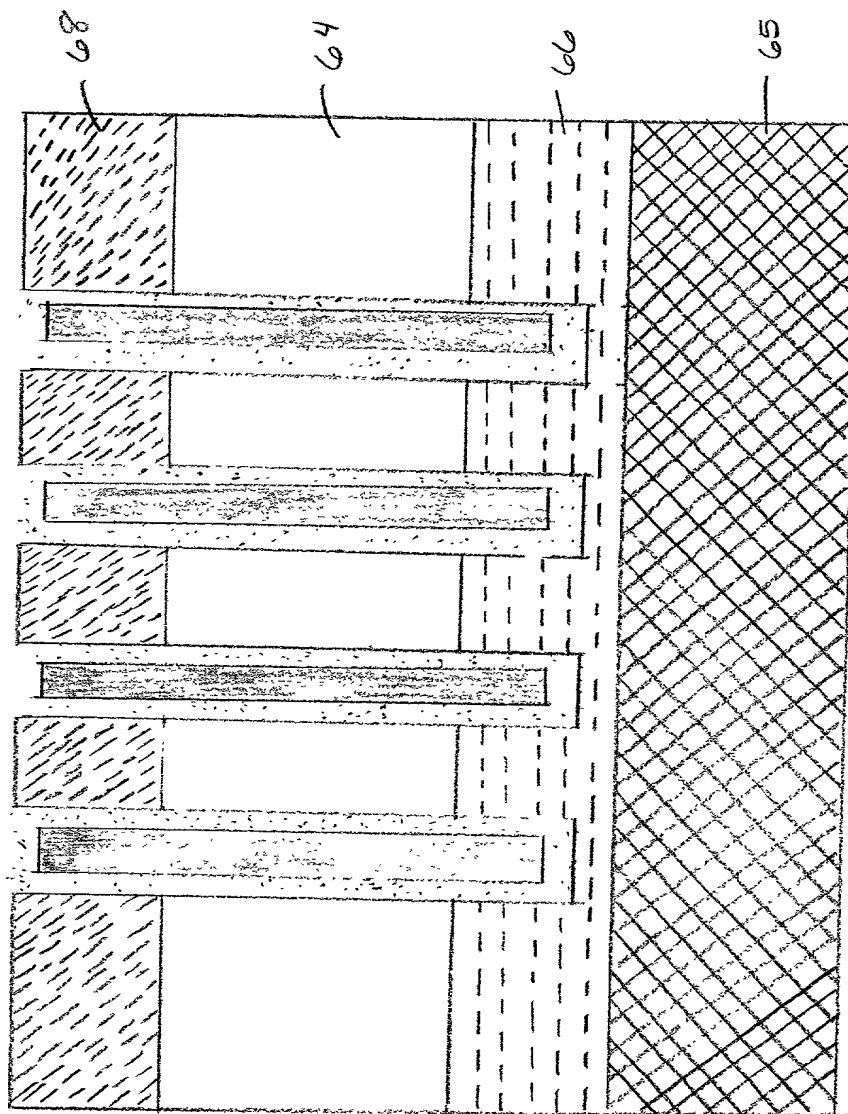


Figure 5B

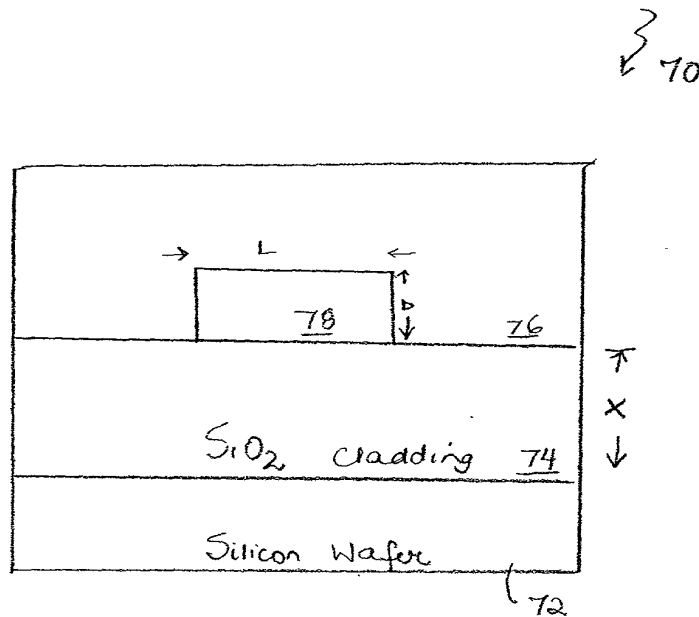


Figure 5C

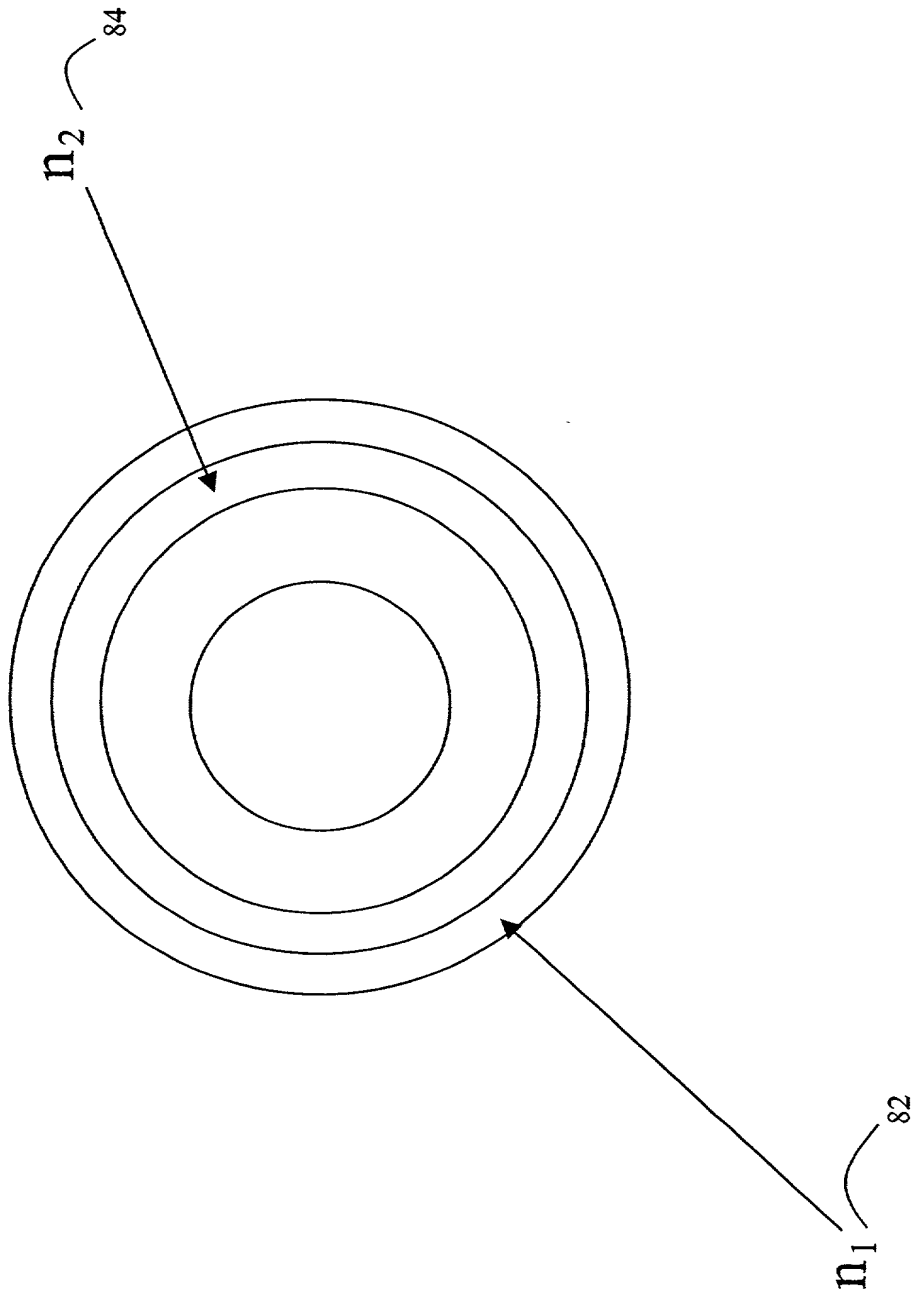


Figure 6

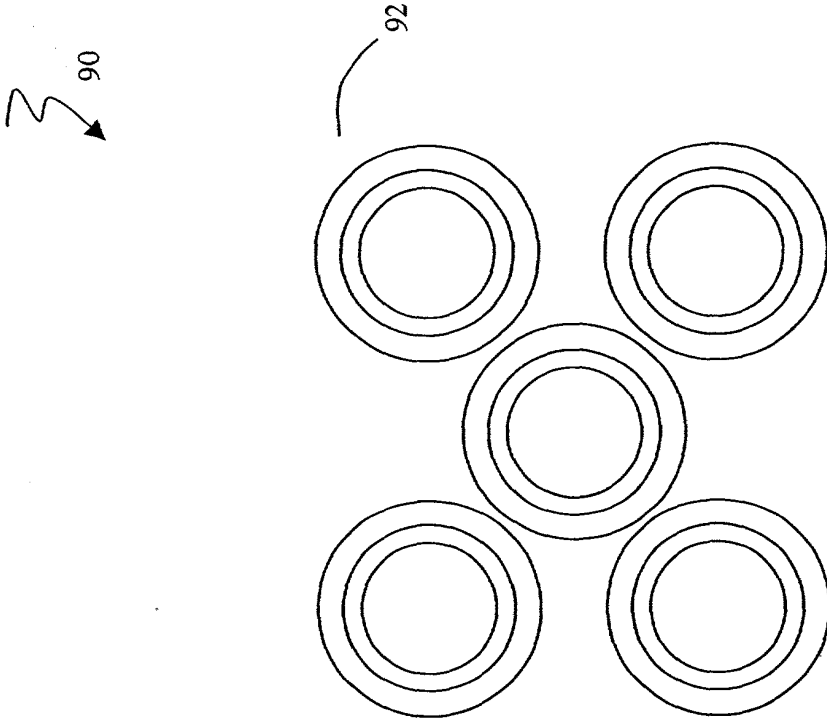


Figure 7

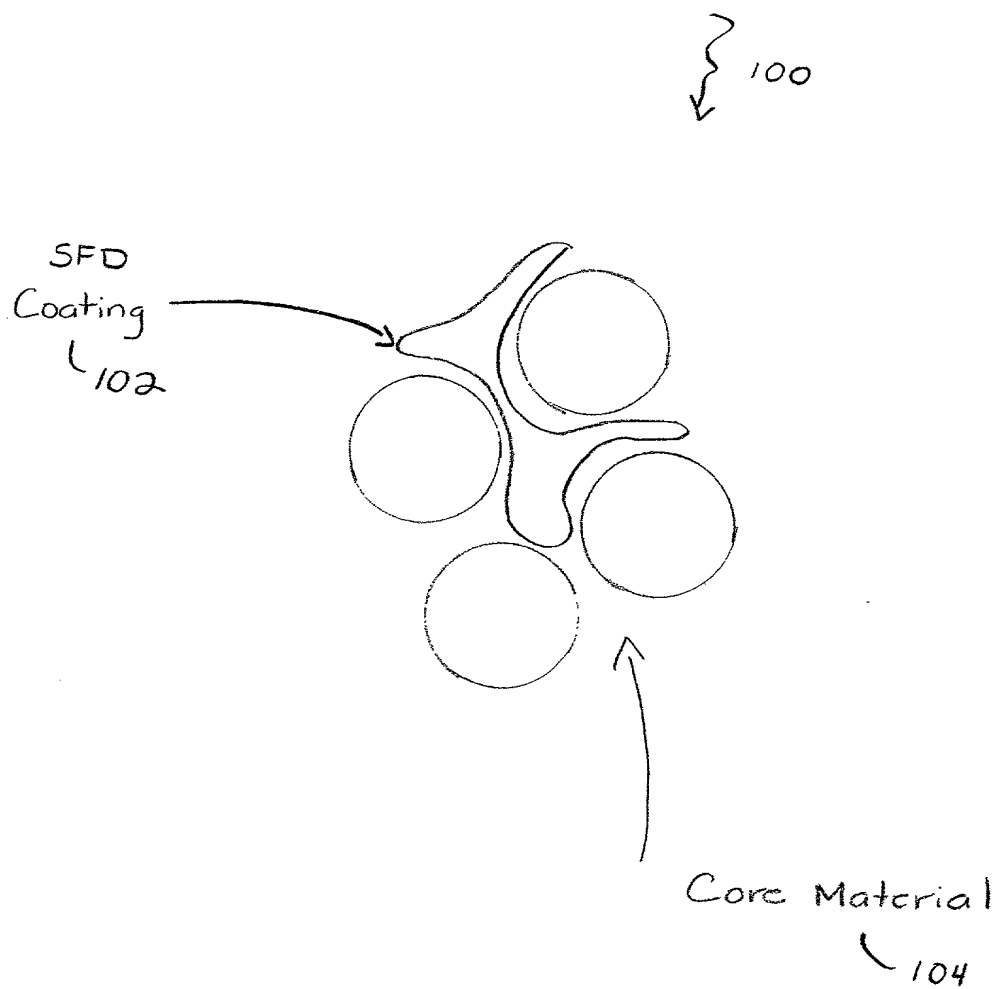


Figure 8

110

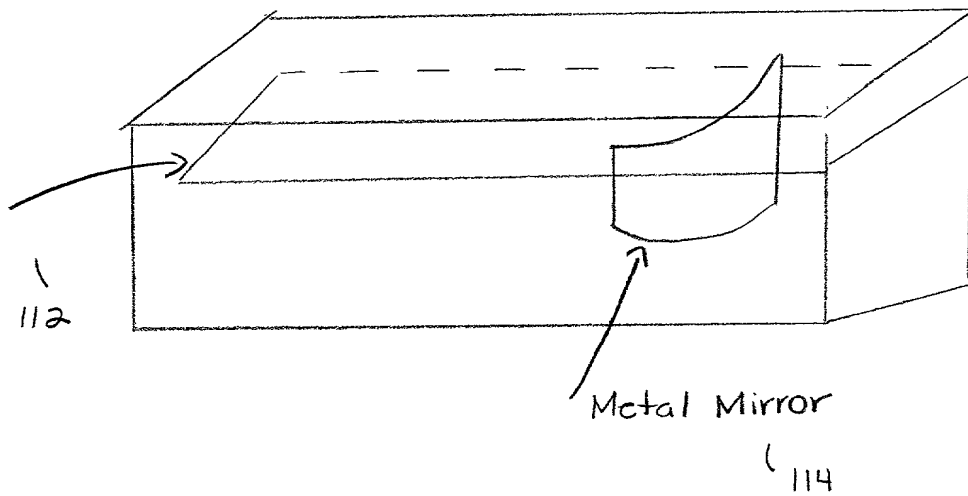


Figure 9

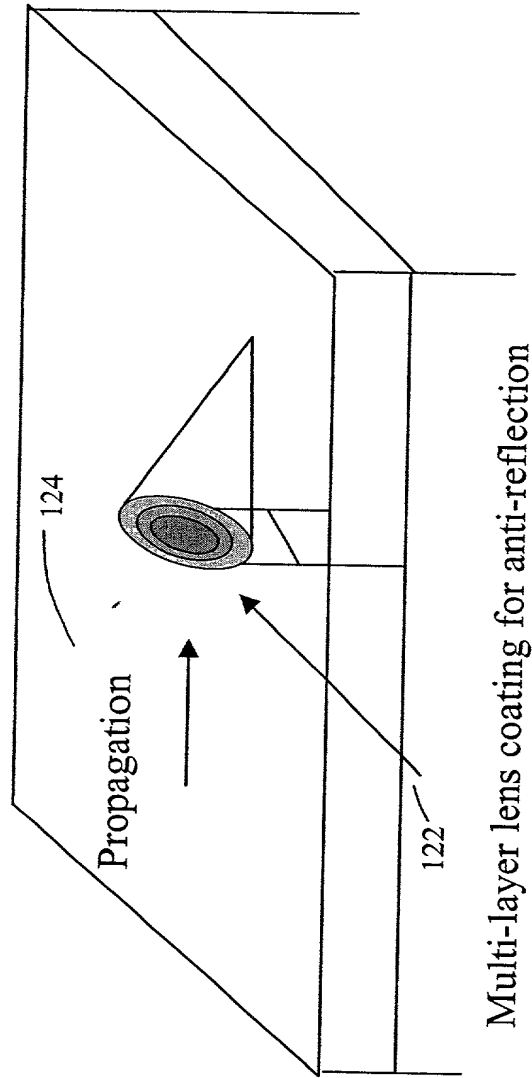


Figure 10

140

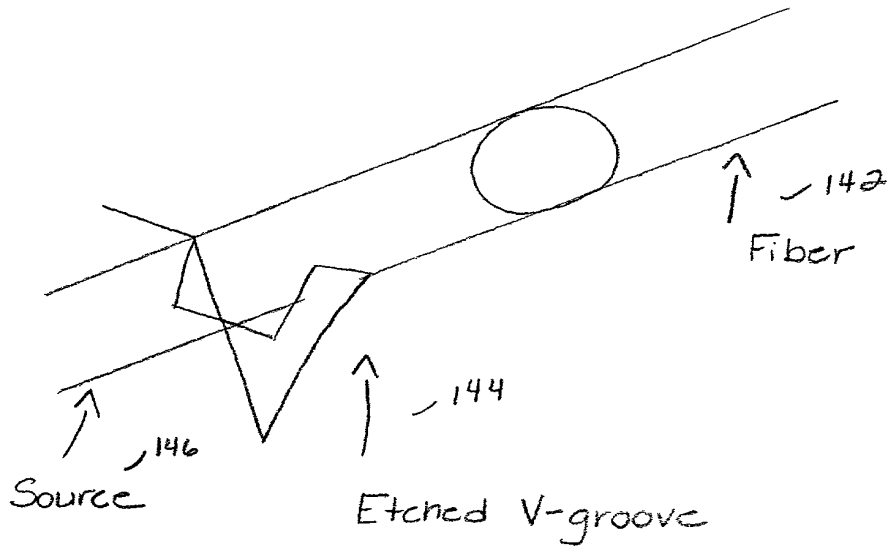


Figure 11A

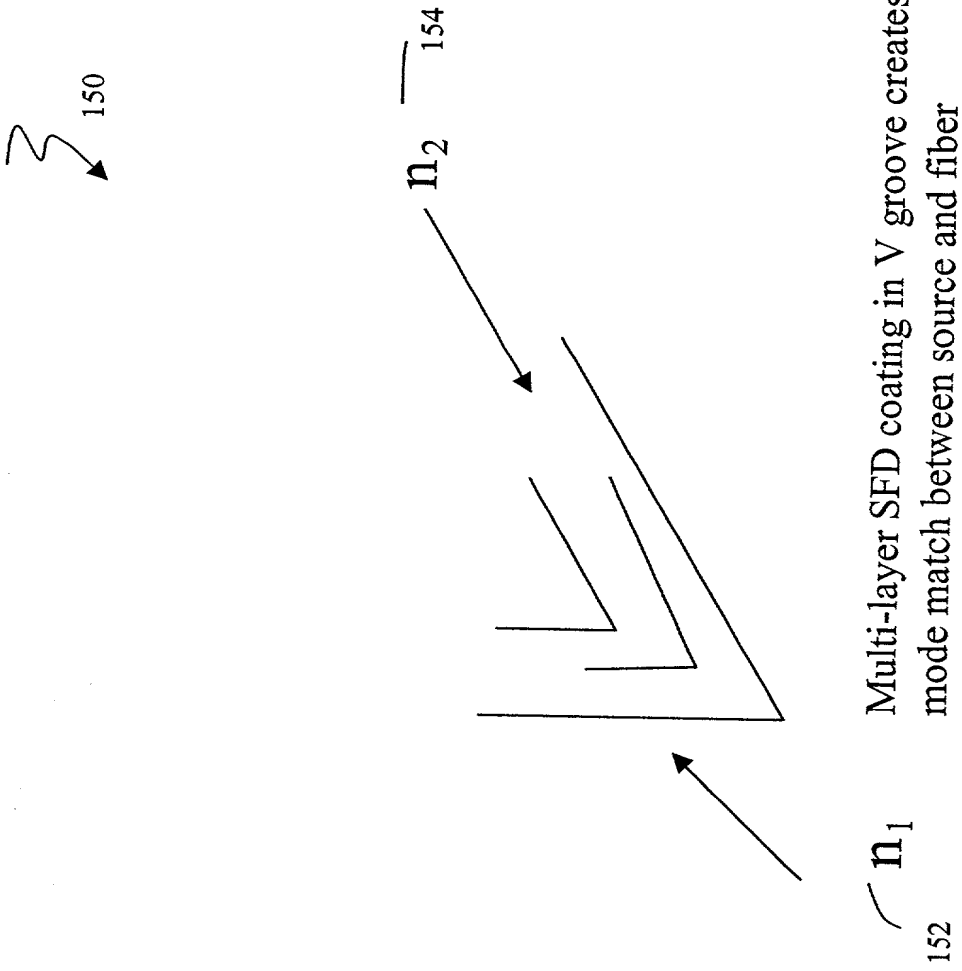


Figure 11B

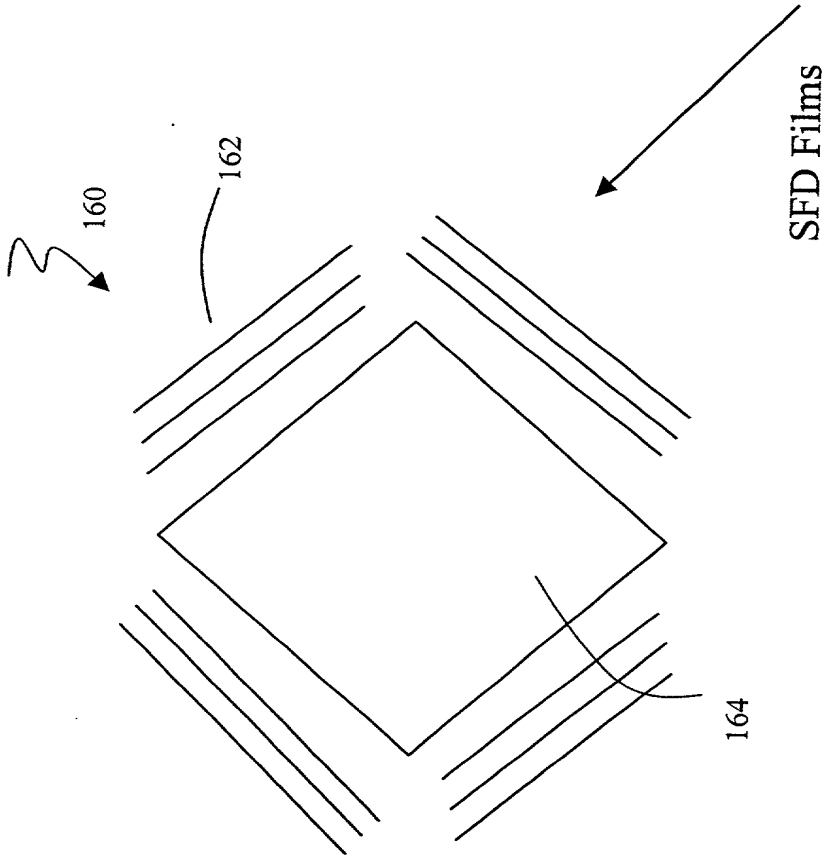


Figure 12

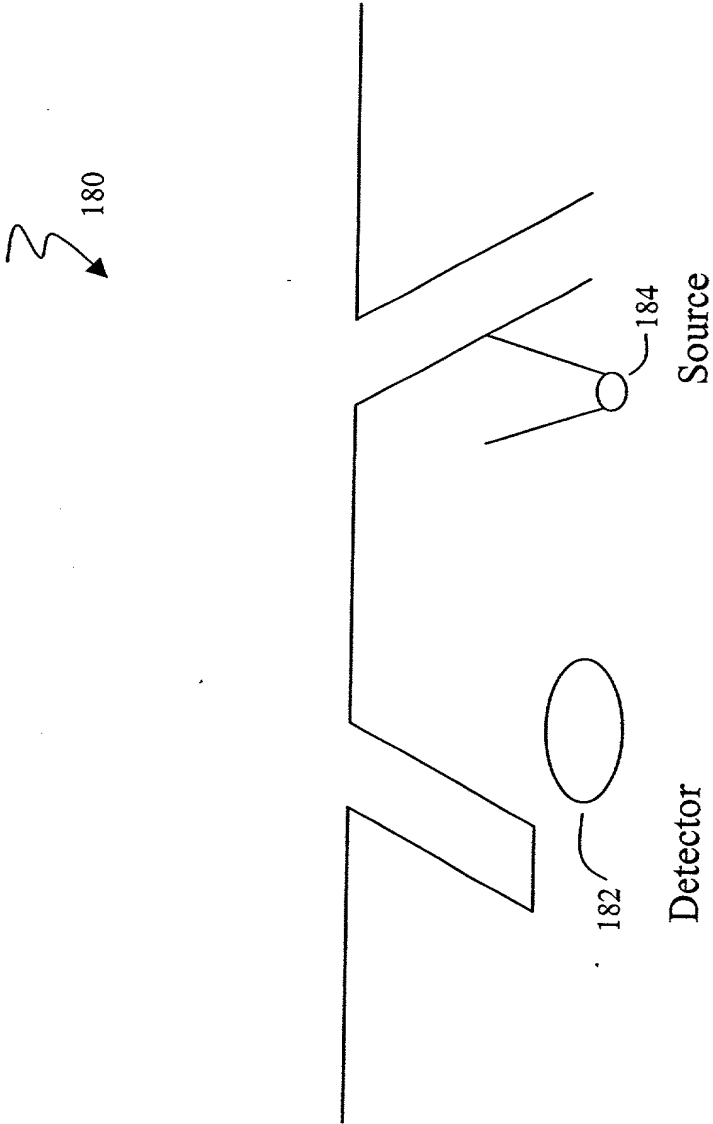


Figure 13A

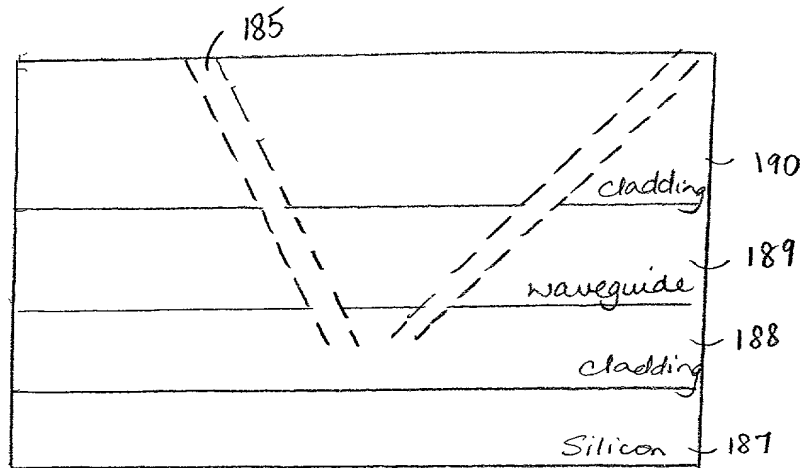


Figure 13B

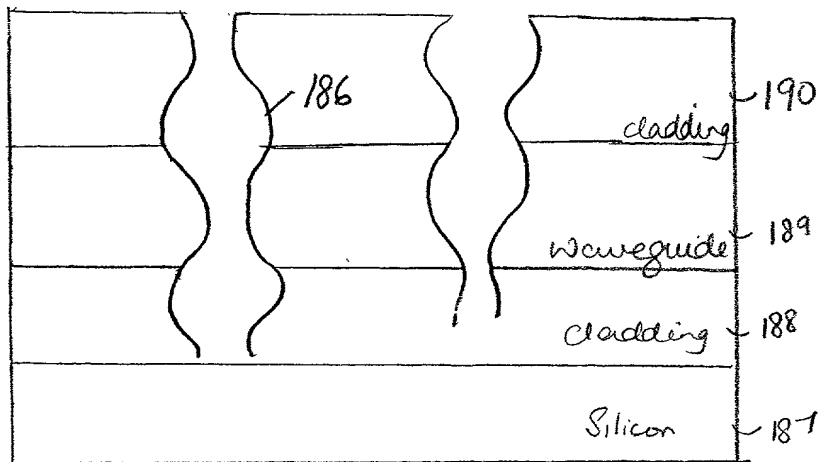
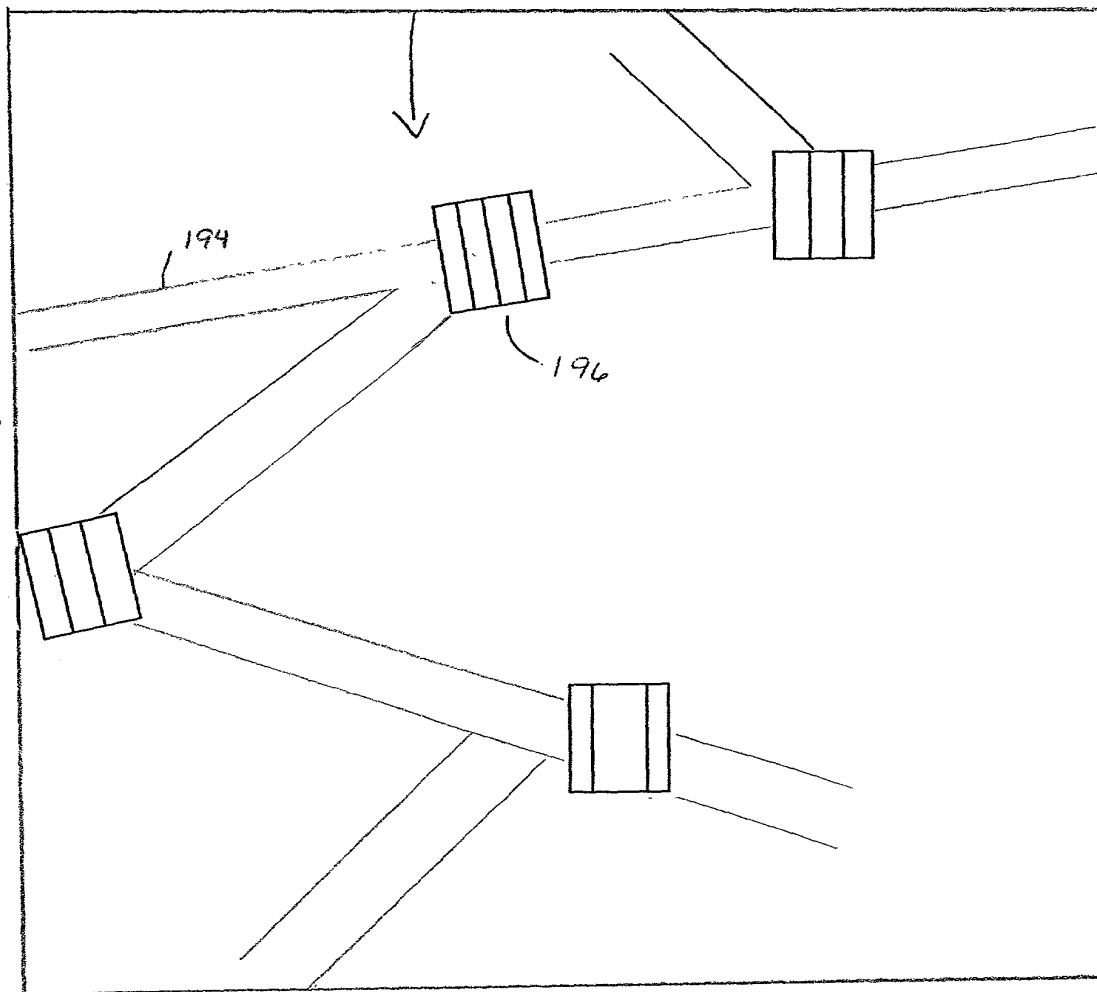


Figure 13C

192

Thin Film Filter



WDM Processing Circuits

Figure 14

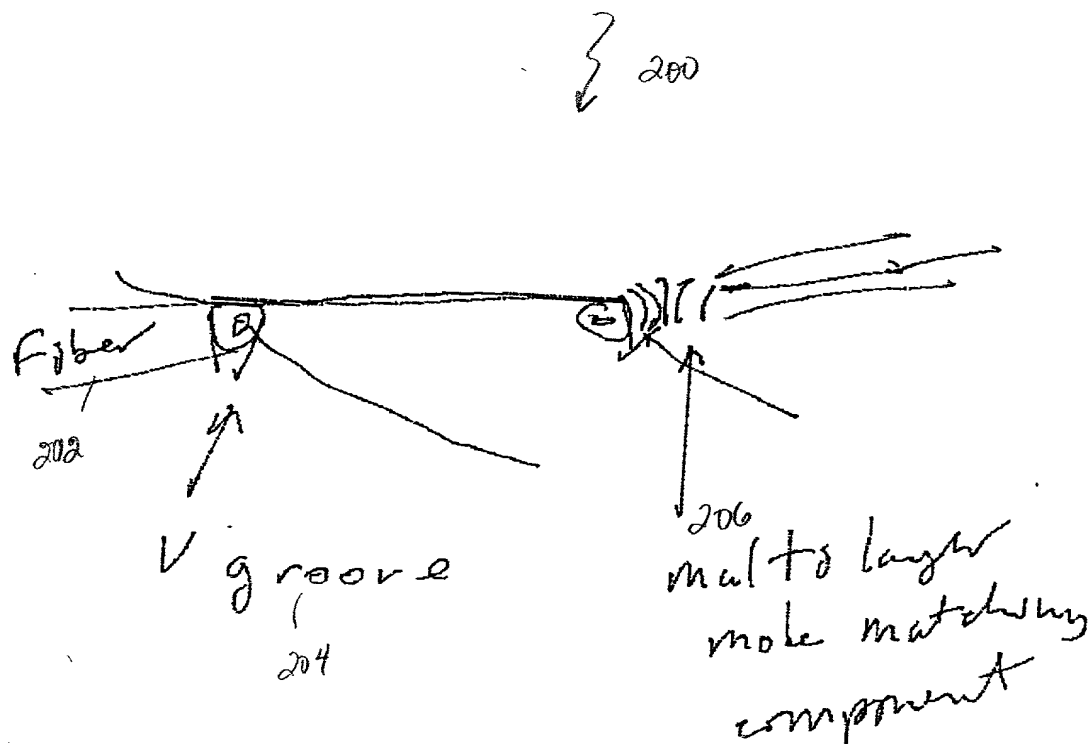


Figure 15

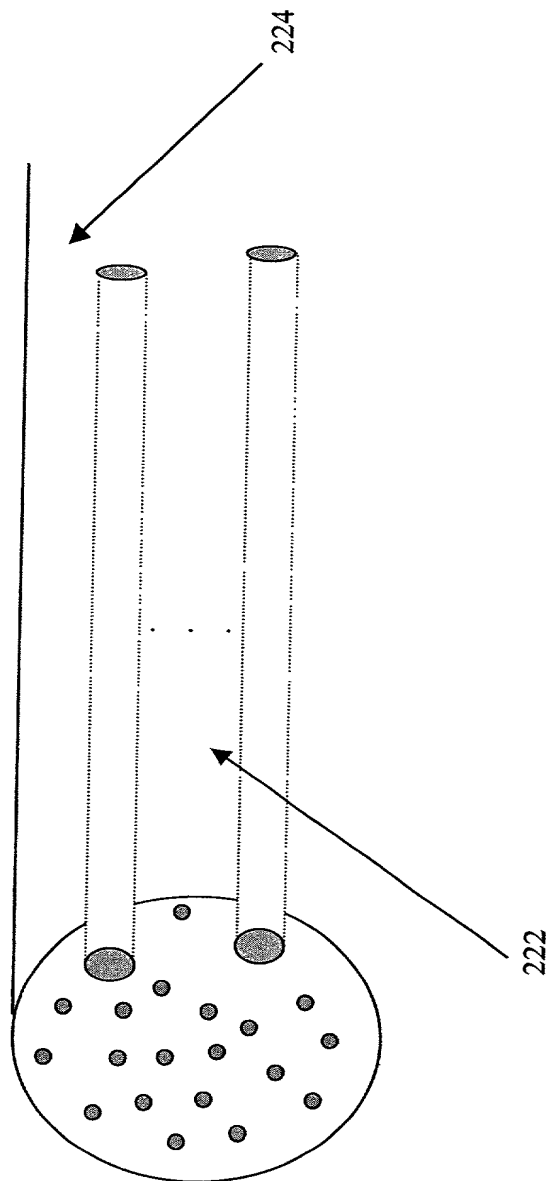


Figure 16

240

242

SFD coating

244

10 mm

Figure 17

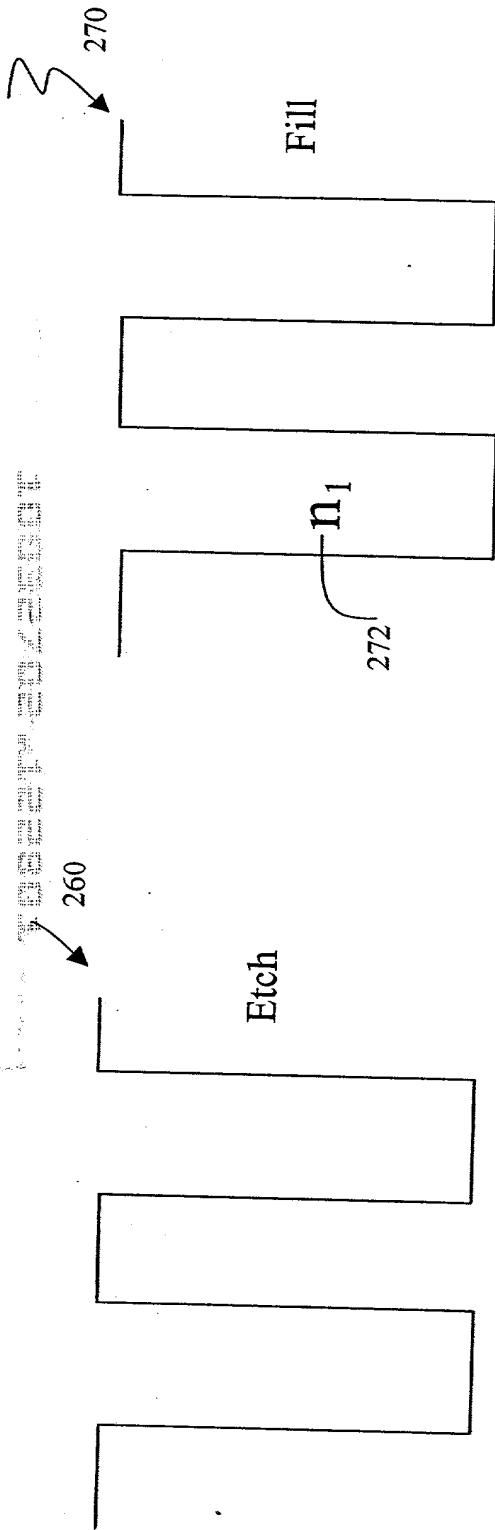


Figure 18A

Figure 18B

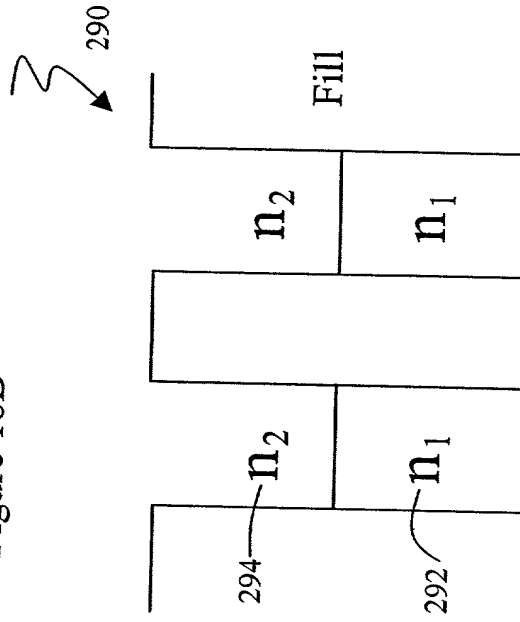


Figure 18D

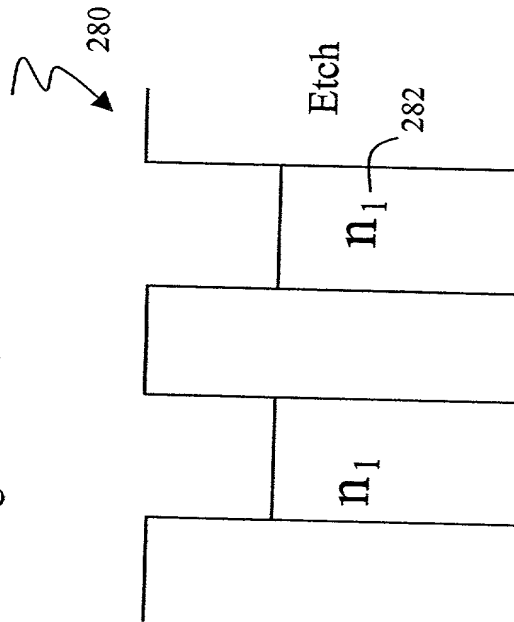


Figure 18C

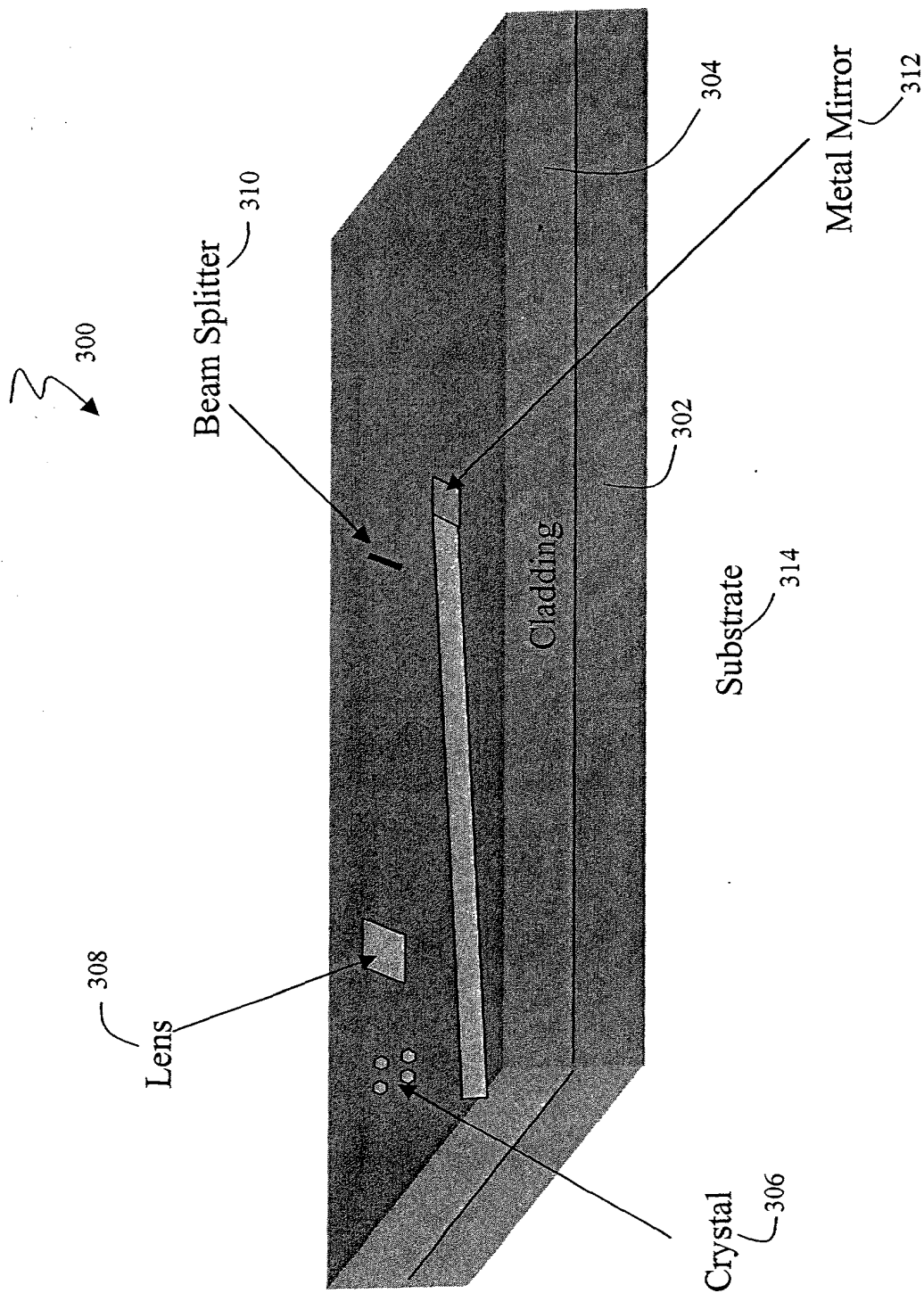


Figure 19

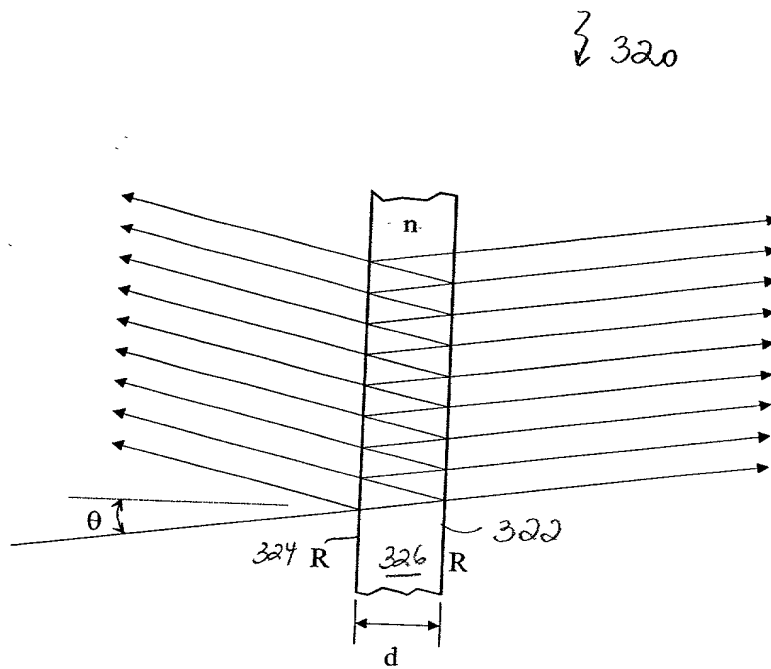


Figure 20

330

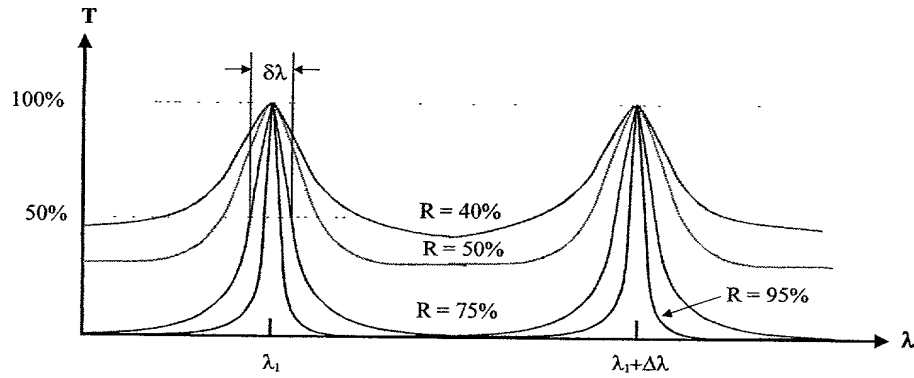


Figure 21

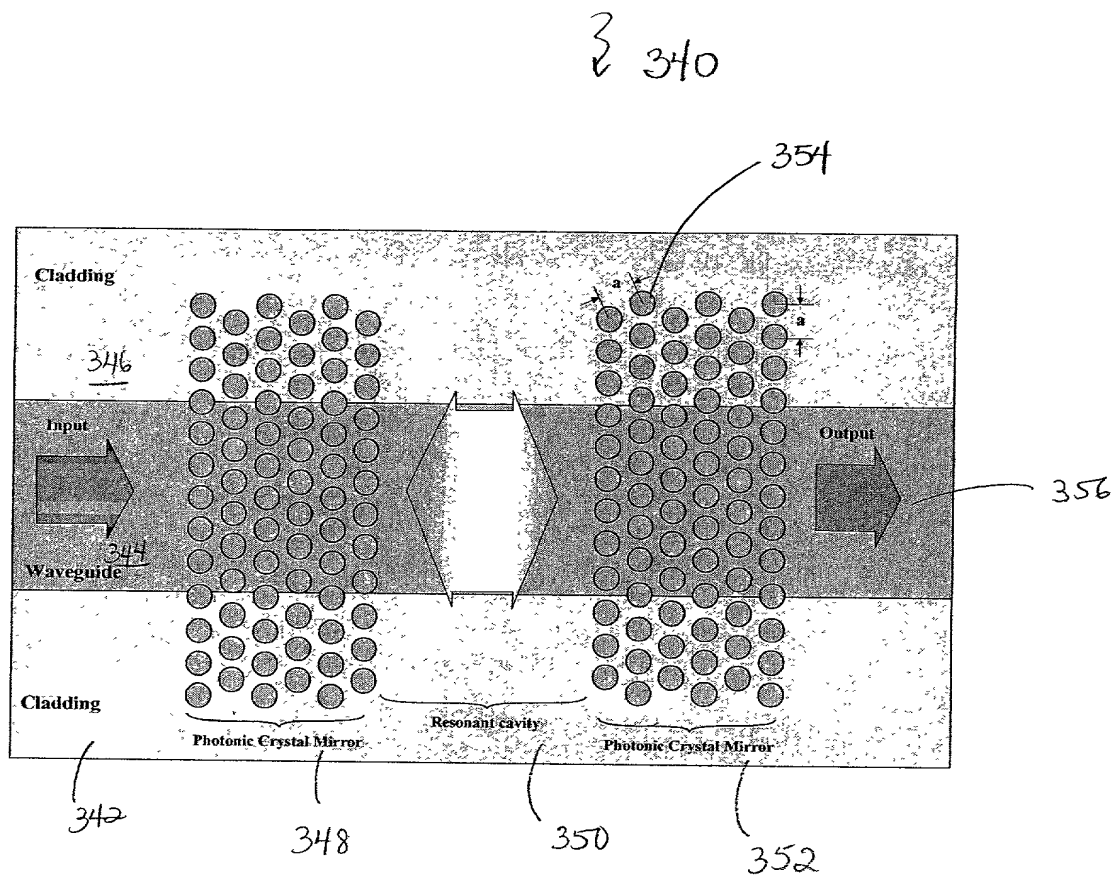


Figure 22

360

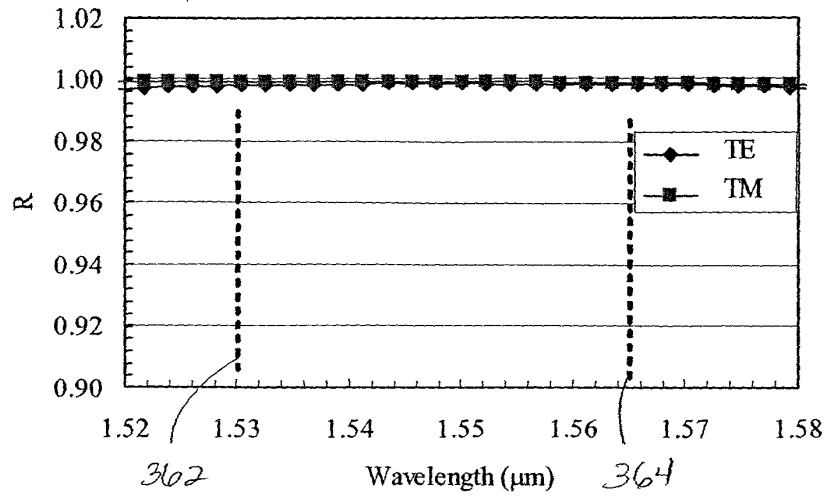


Figure 23

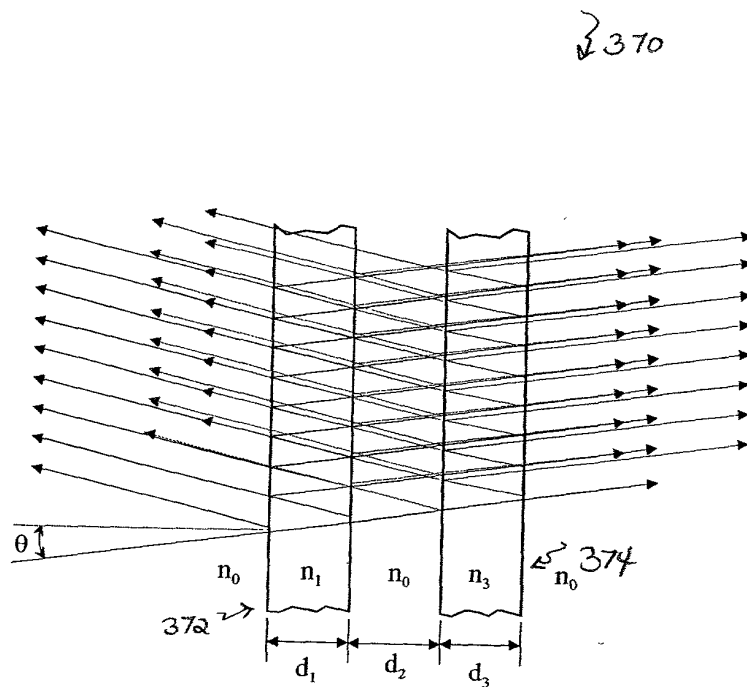


Figure 24

380

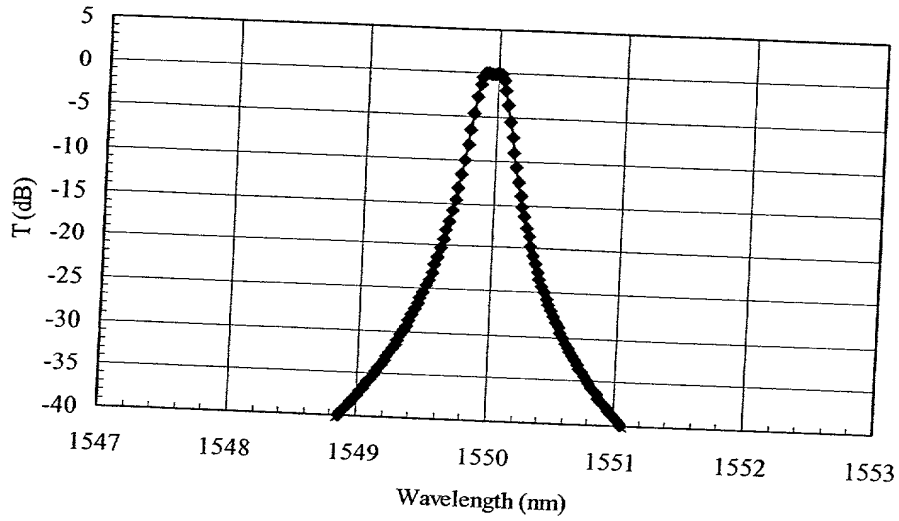


Figure 25

390

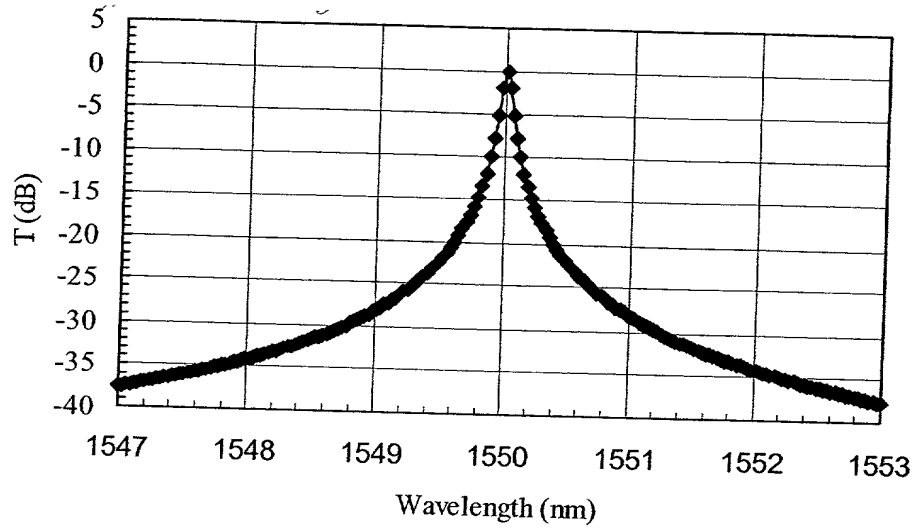


Figure 26

400

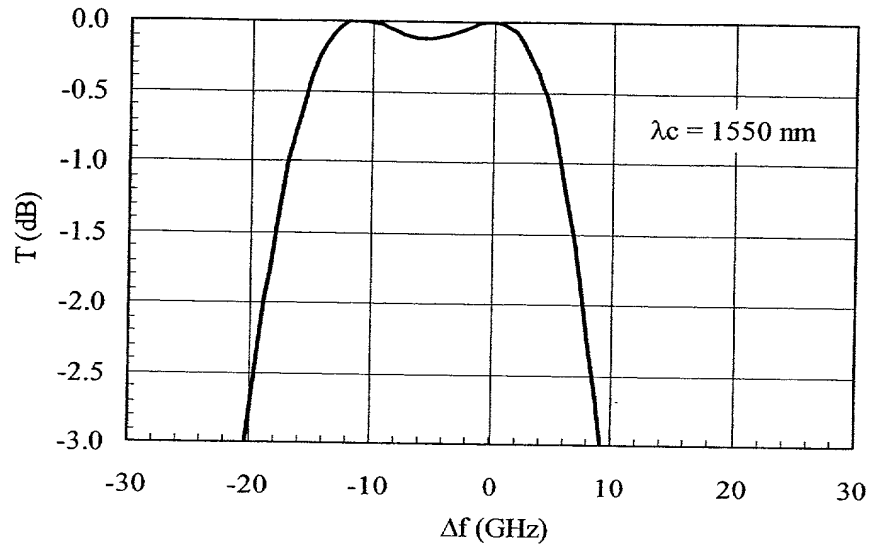


Figure 27

410

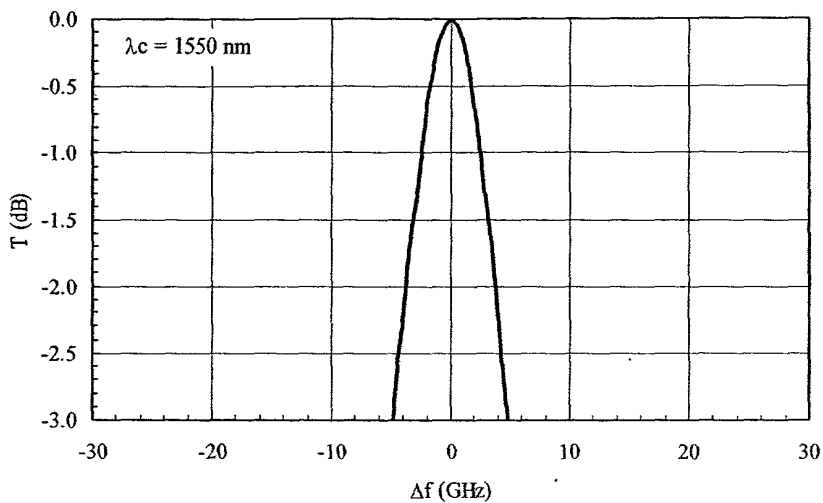
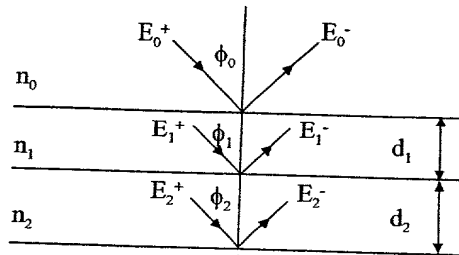
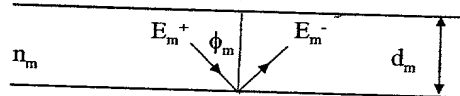


Figure 28



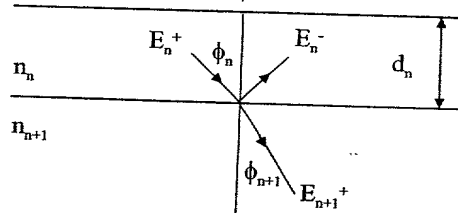
420

Figure 29A



430

Figure 29B



440

Figure 29C

450

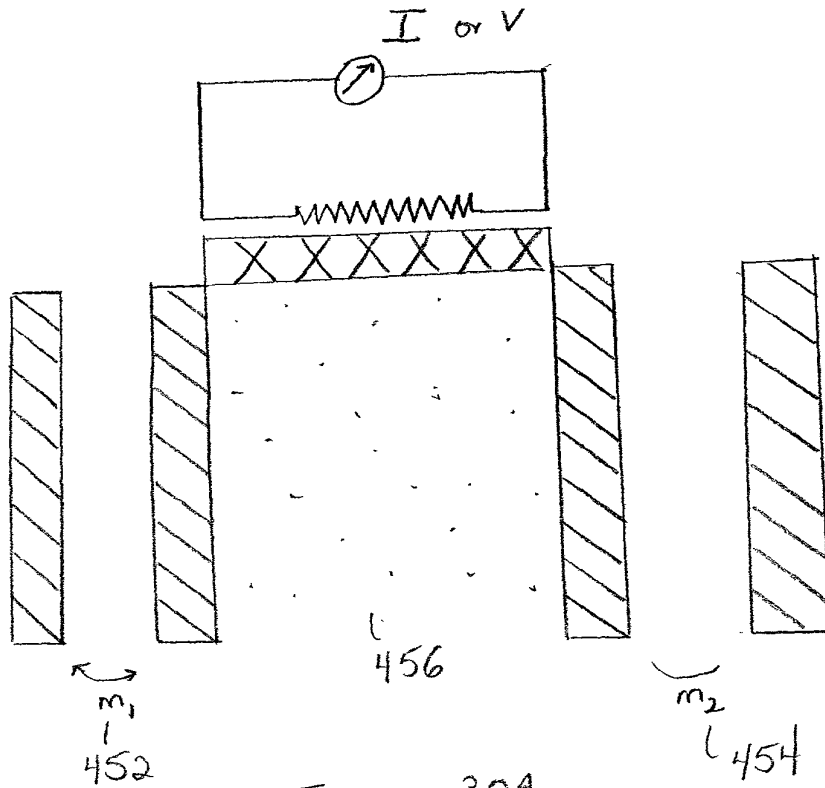


Figure 30A

470

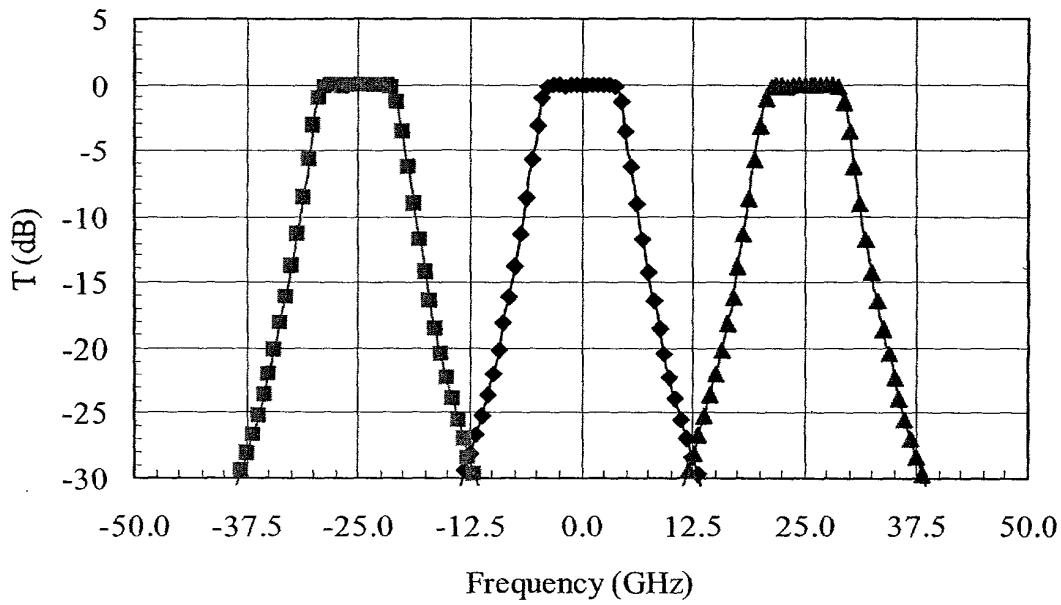


Figure 30B

3 480

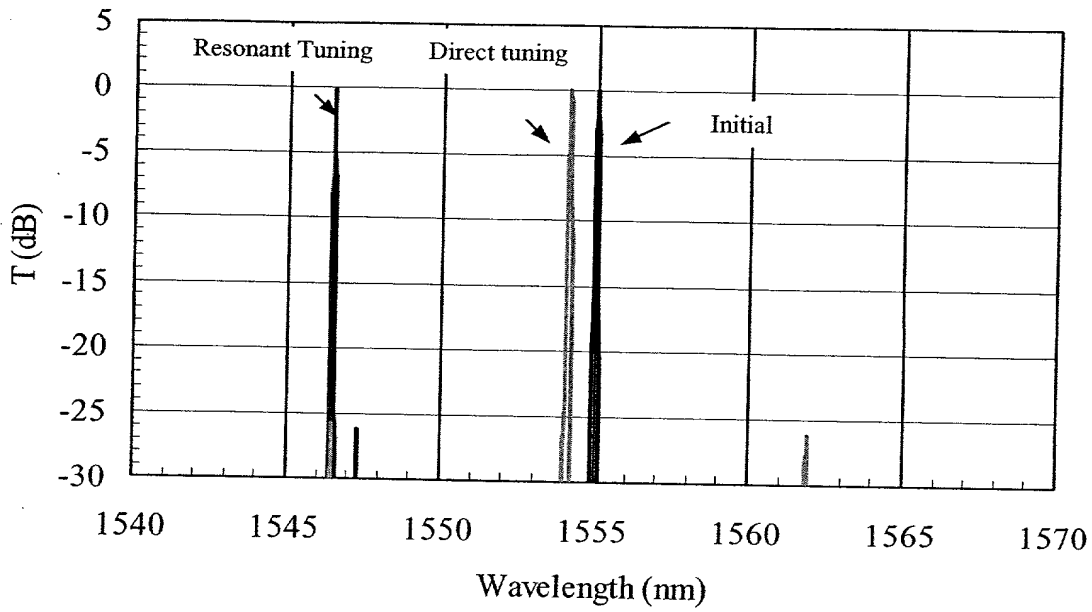


Figure 31

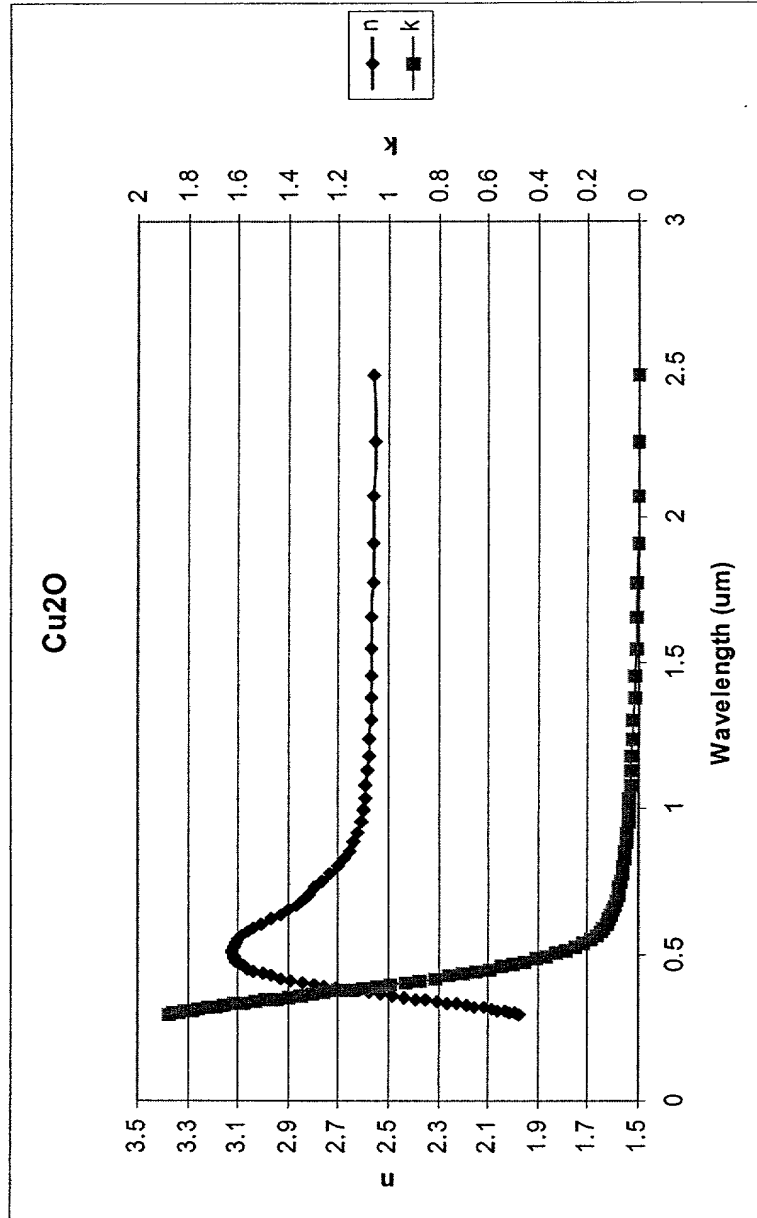


Figure 32

500

520

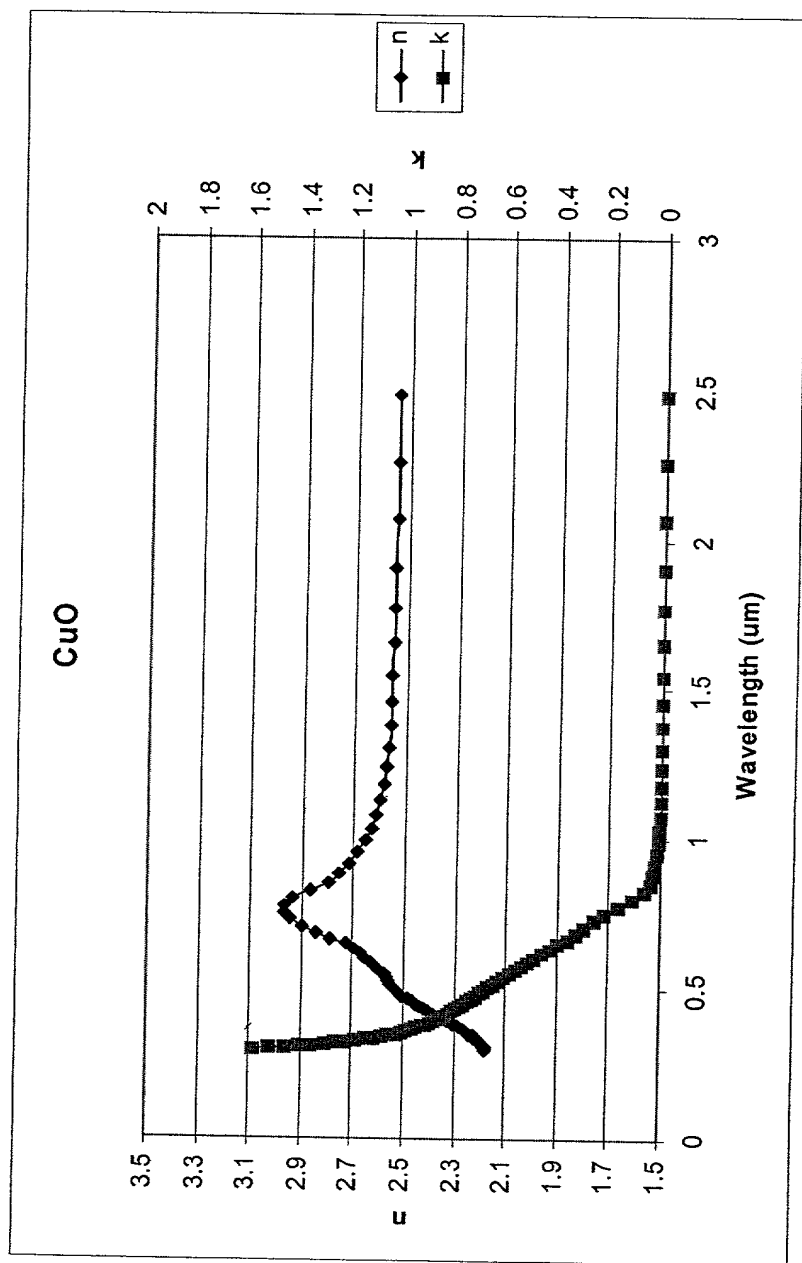


Figure 33

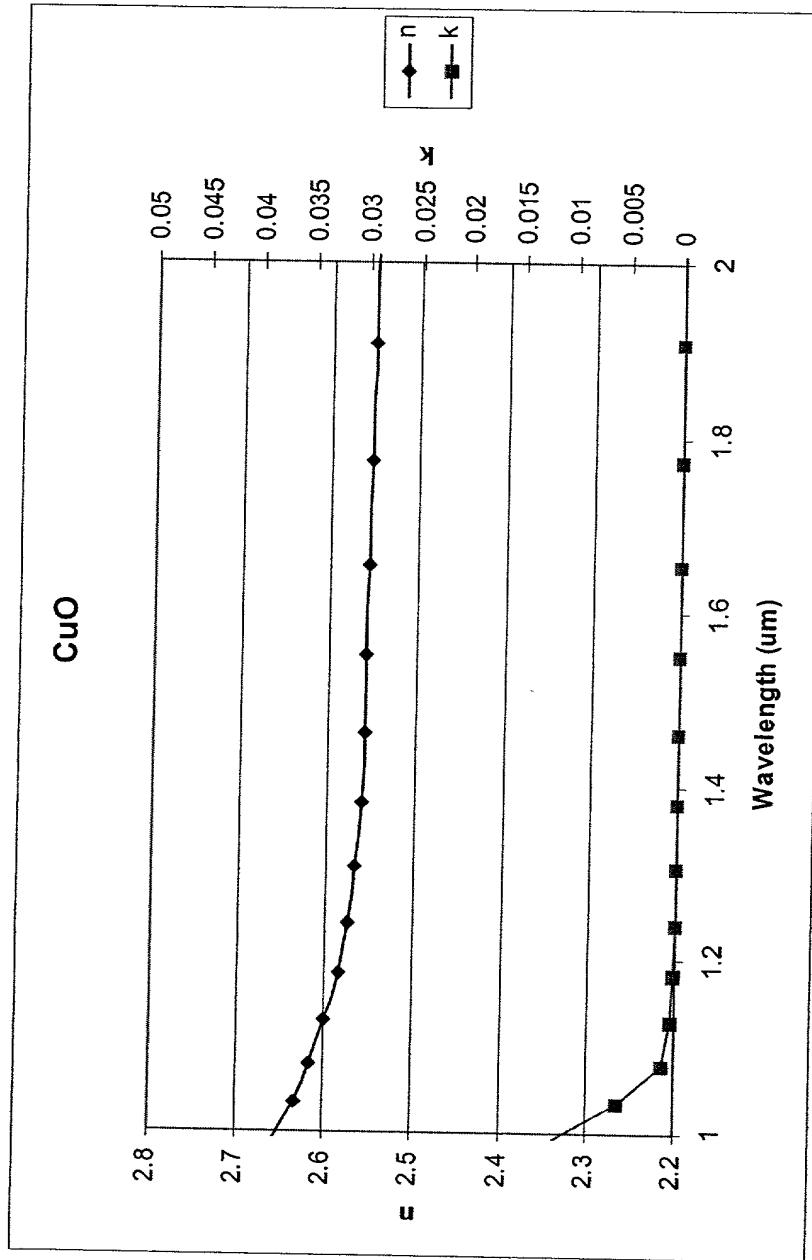


Figure 34

530
 2.530

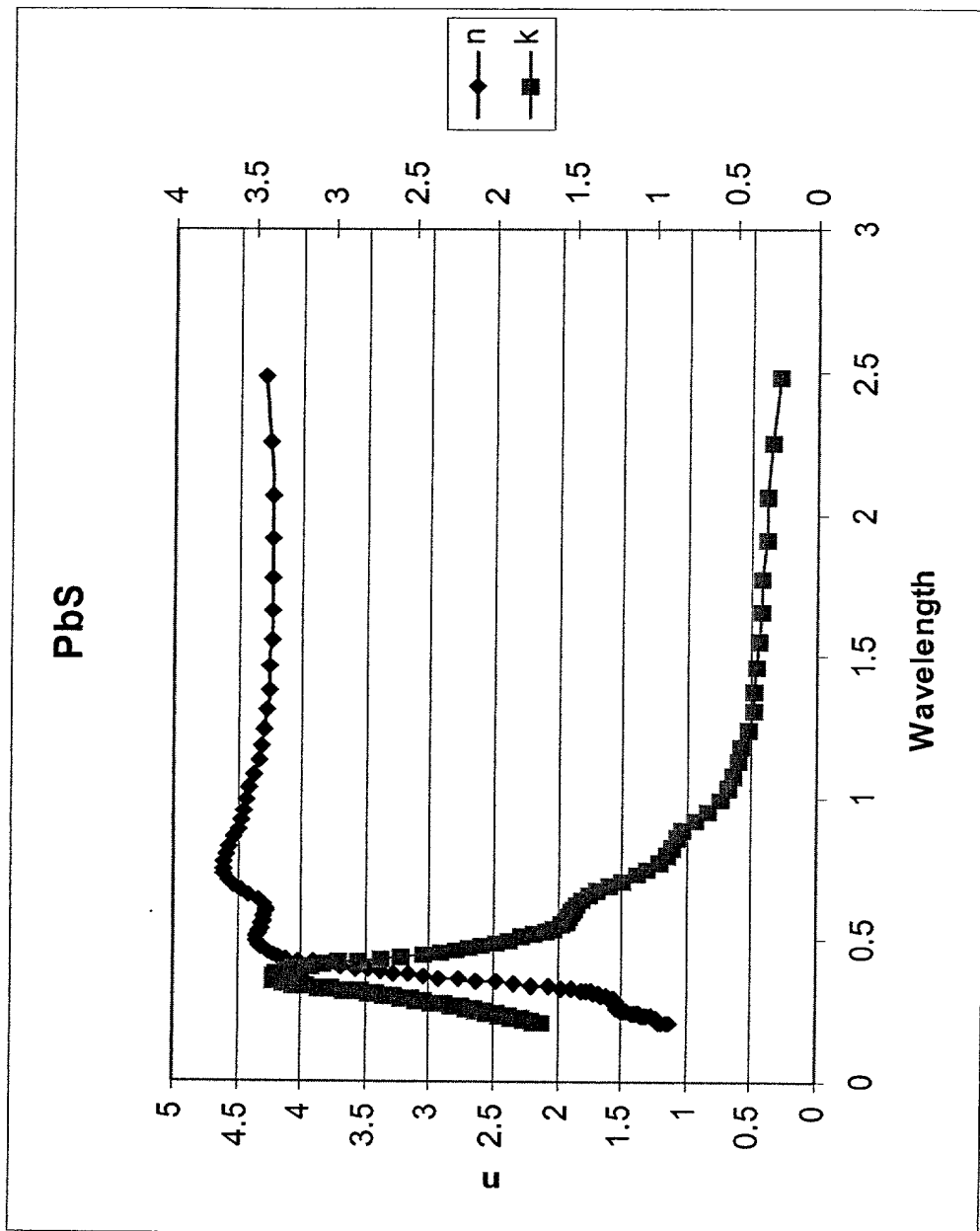


Figure 35

540

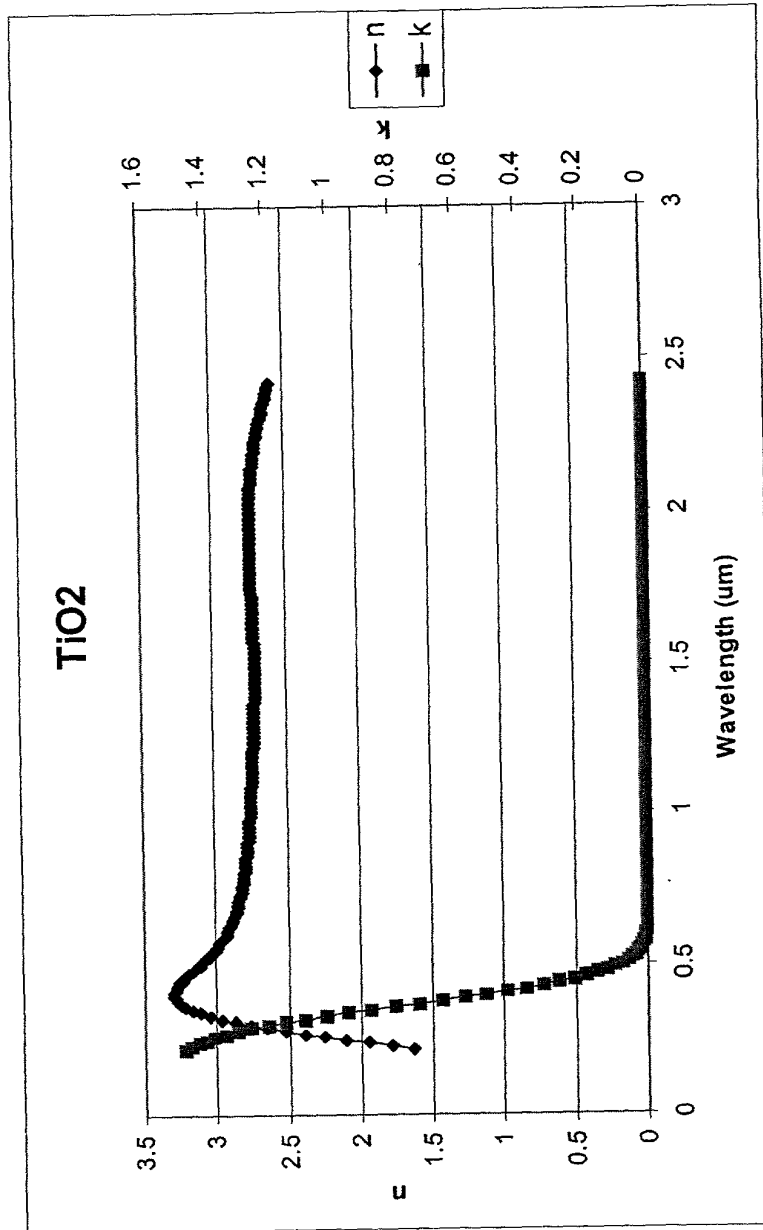


Figure 36

2550

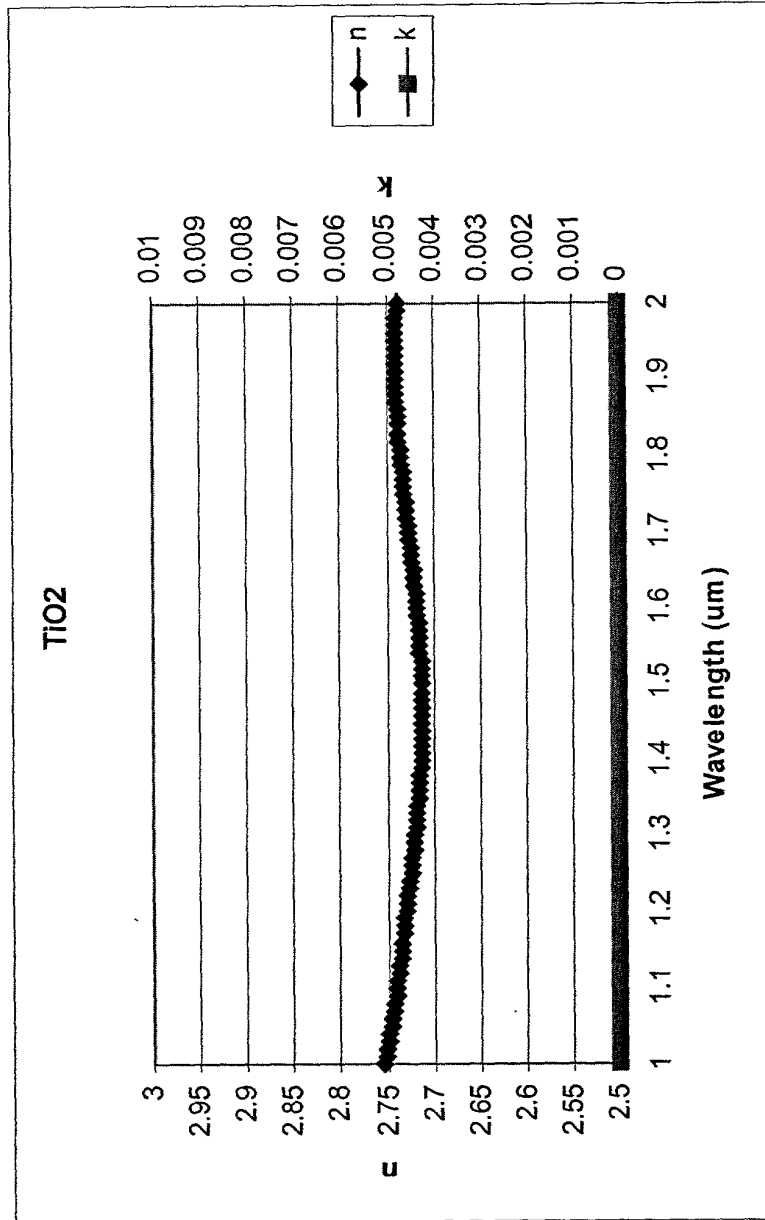


Figure 37

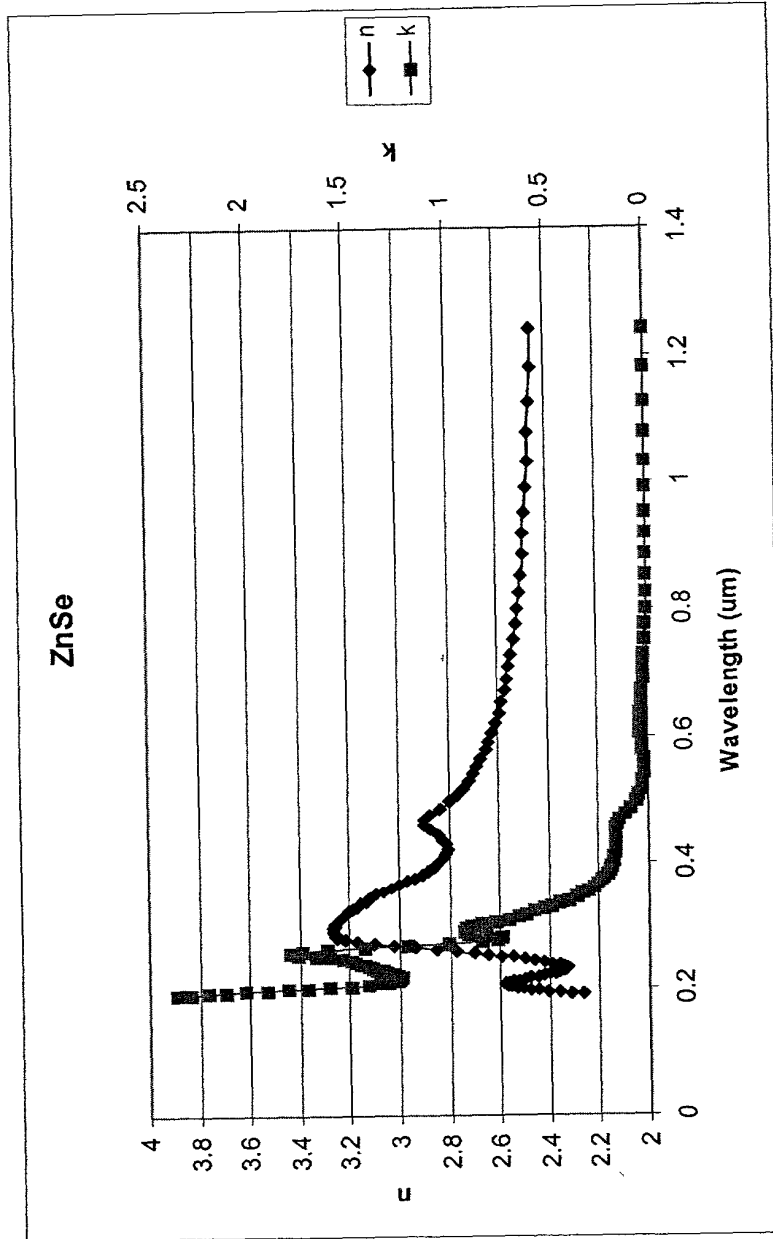


Figure 38

570

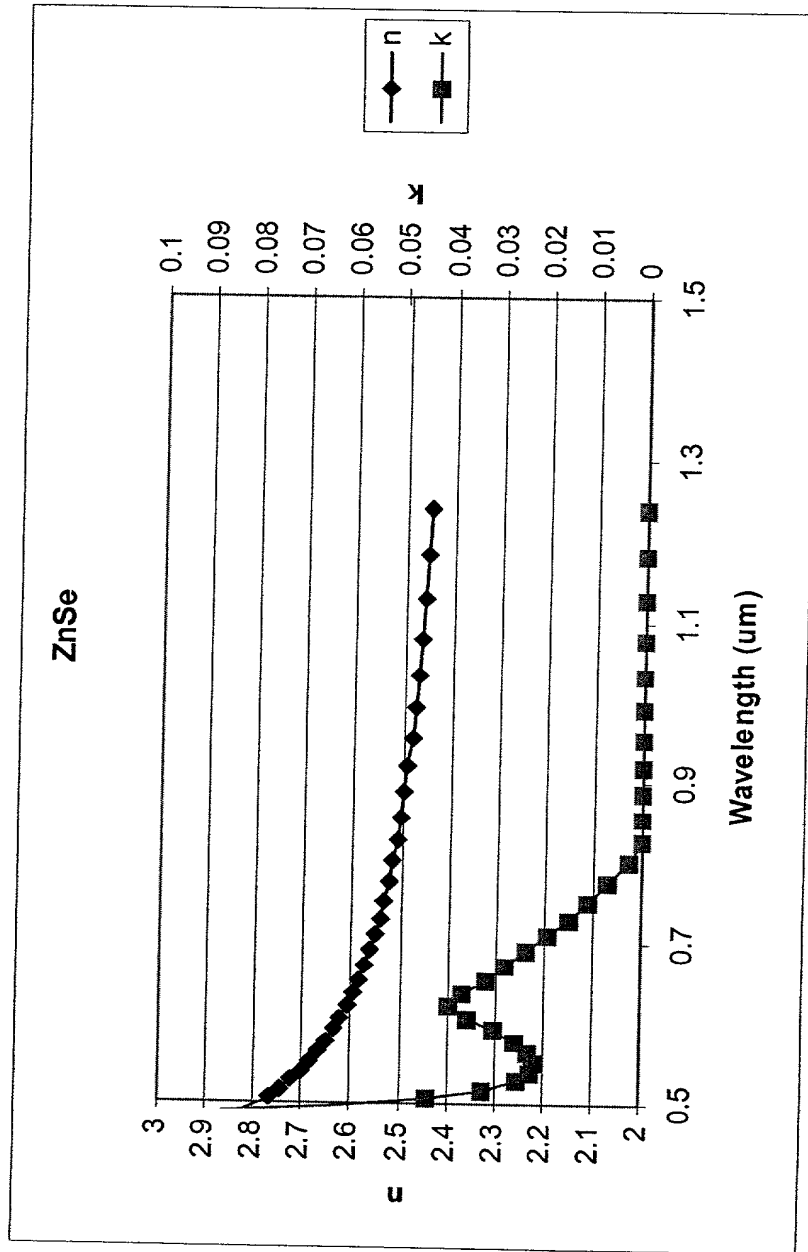


Figure 39

580

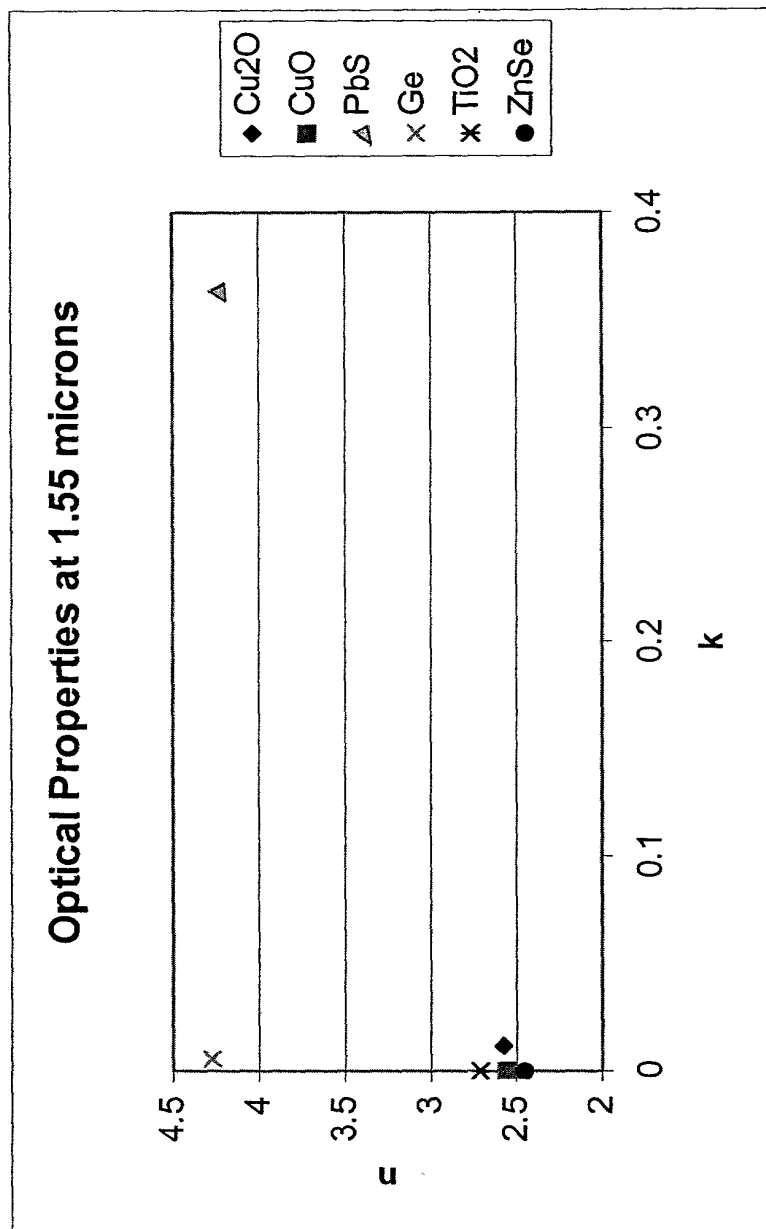


Figure 40

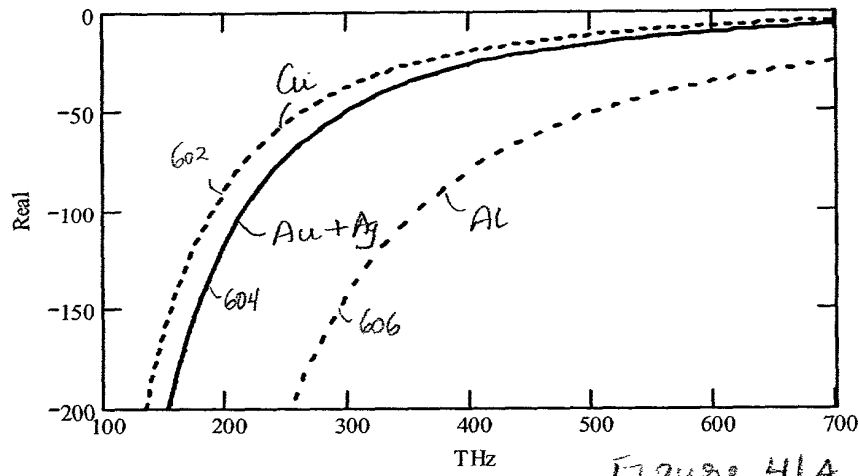


Figure 41A

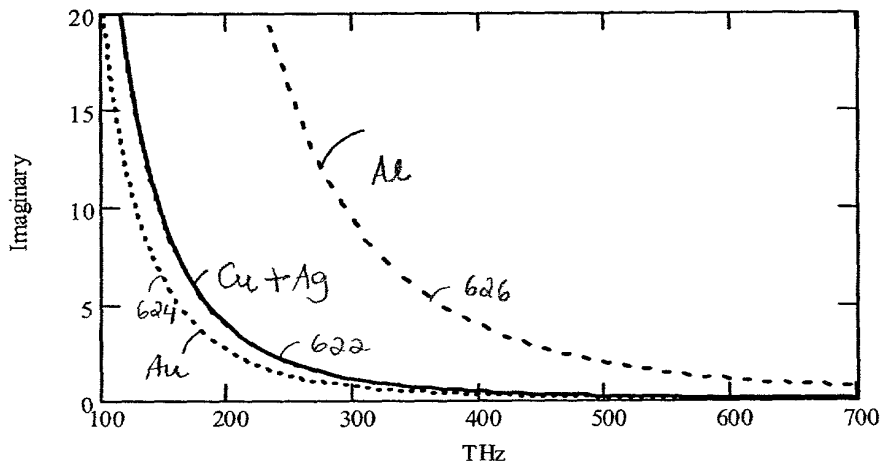


Figure 41B

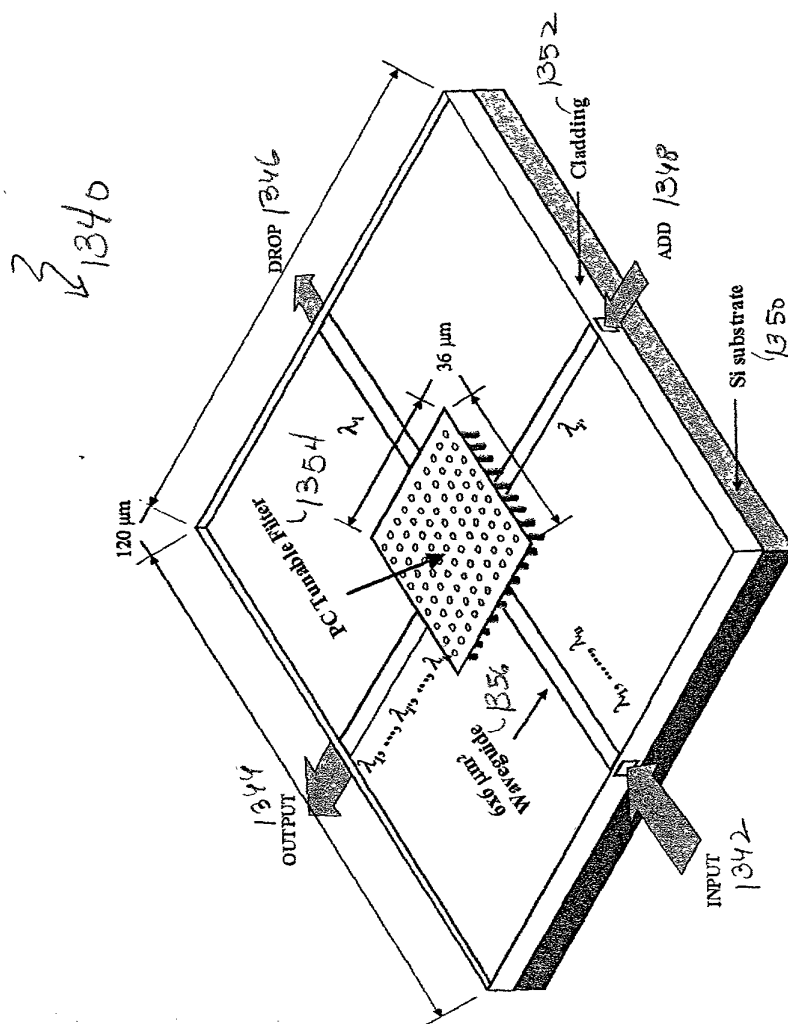


Figure 42 A

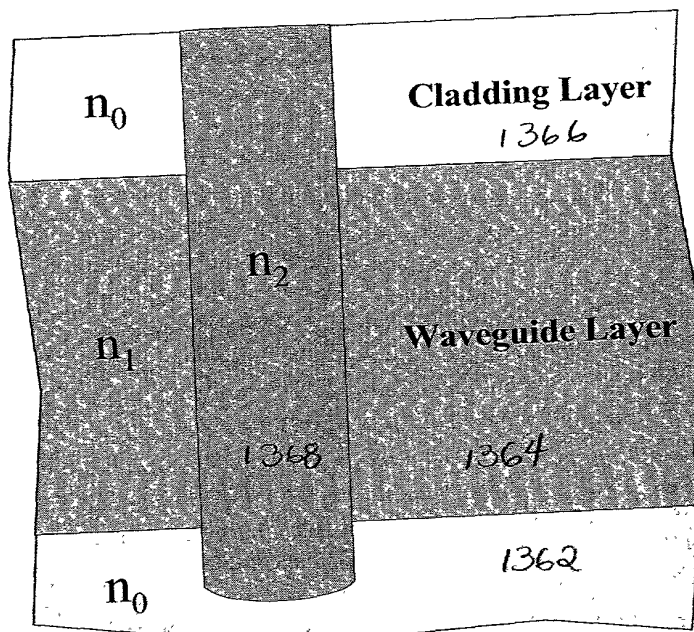


Figure 42B

1380

multi-layer

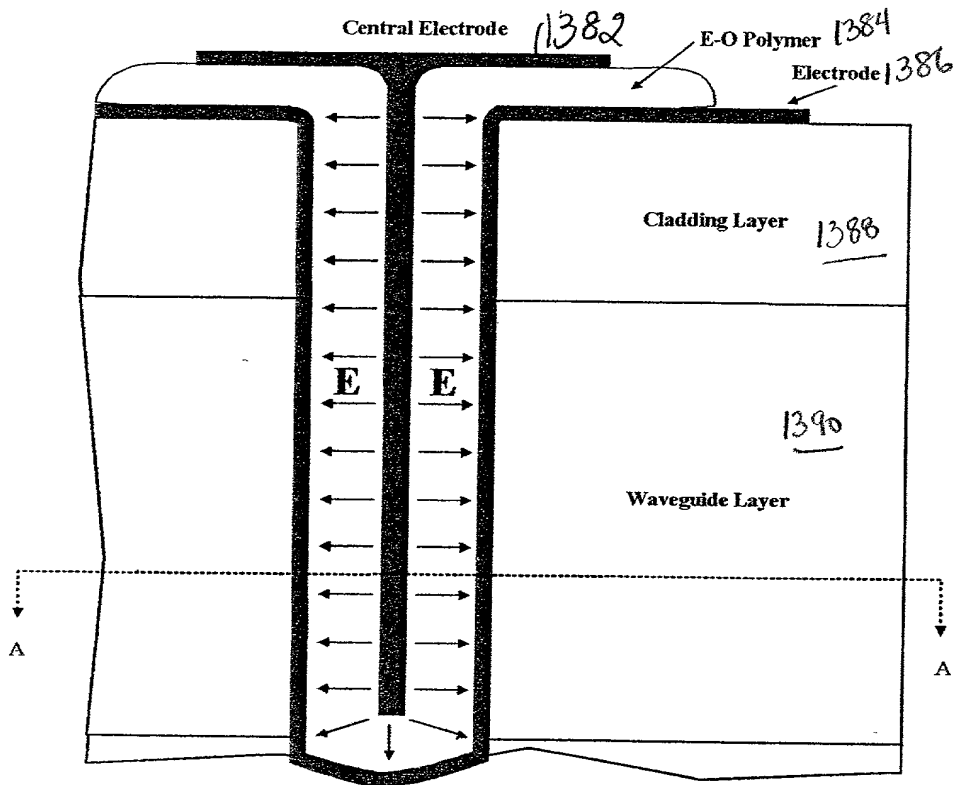
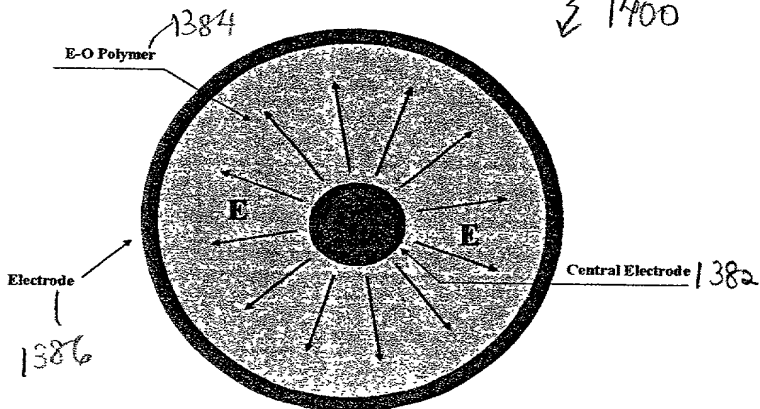


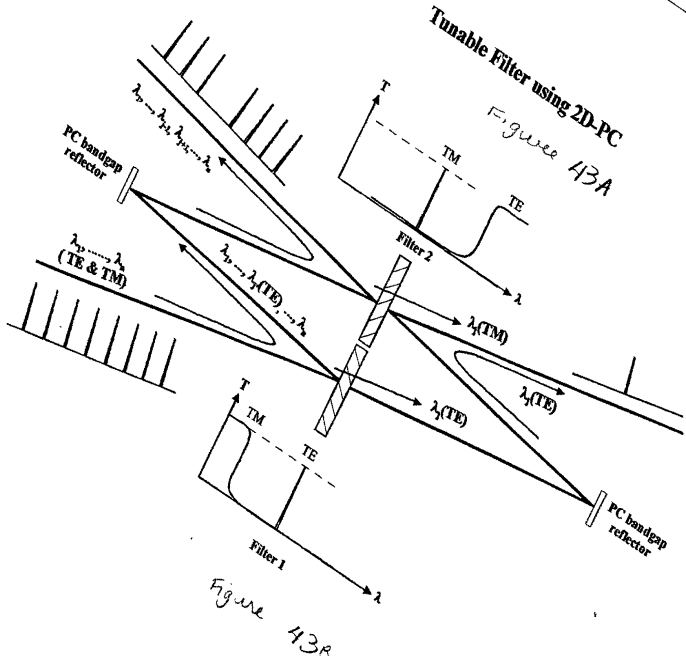
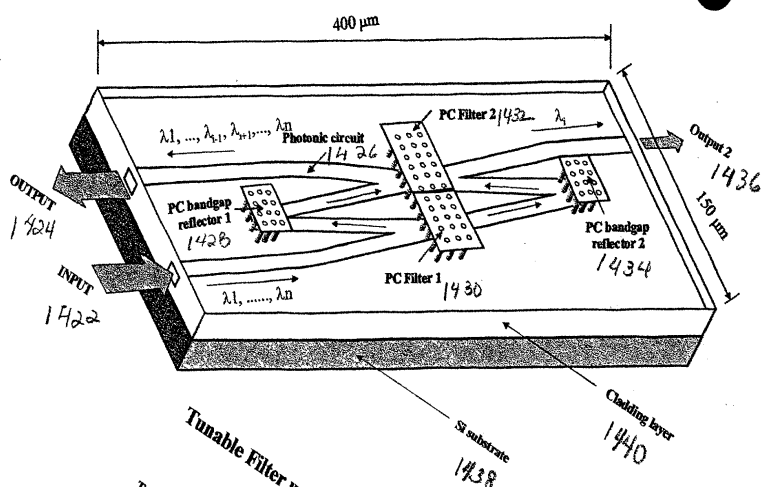
Figure 42C
 Micro-View of PC unit

1400



A-A View

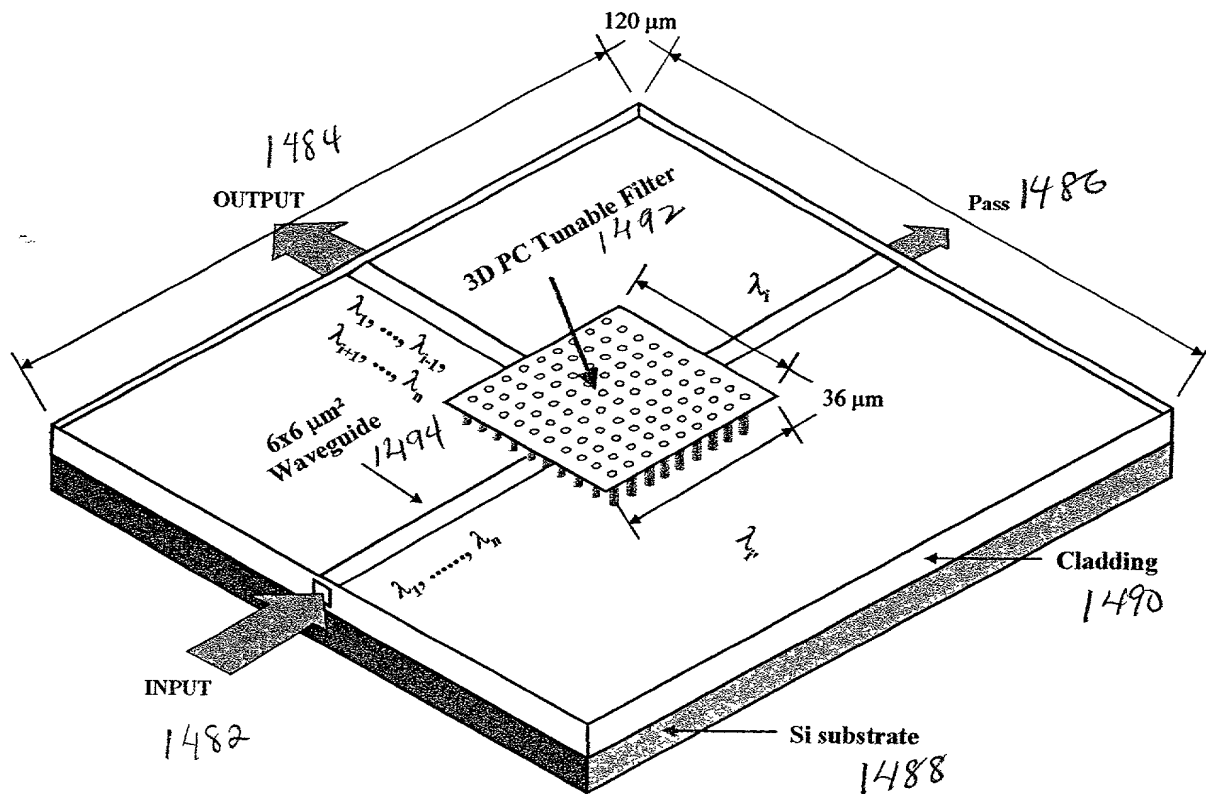
Figure 42D



Tunable Filter using 2D-PC
 Figure 438

Figure 438

21480



3D PC-Tunable Filter

Figure 44A

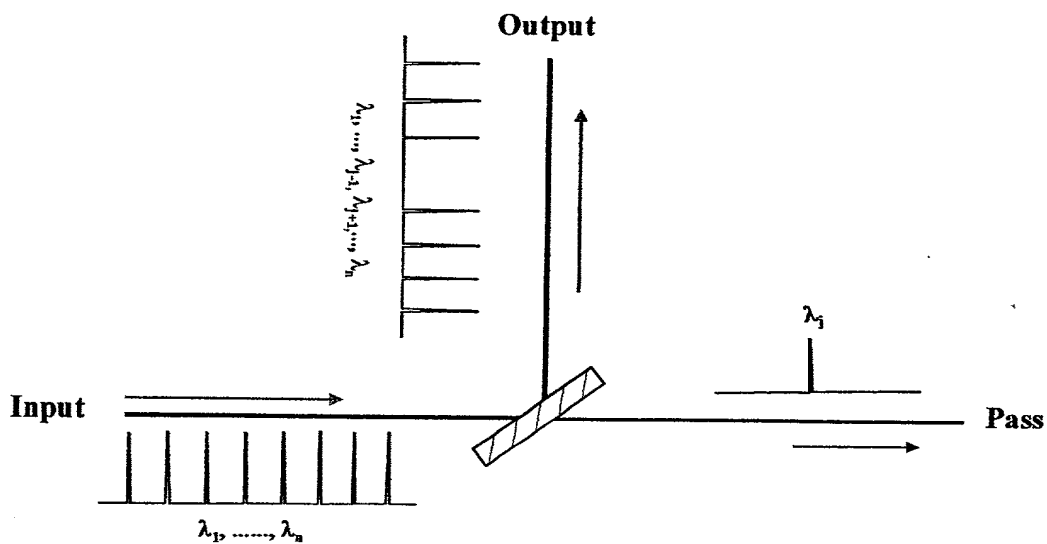


Figure 44B

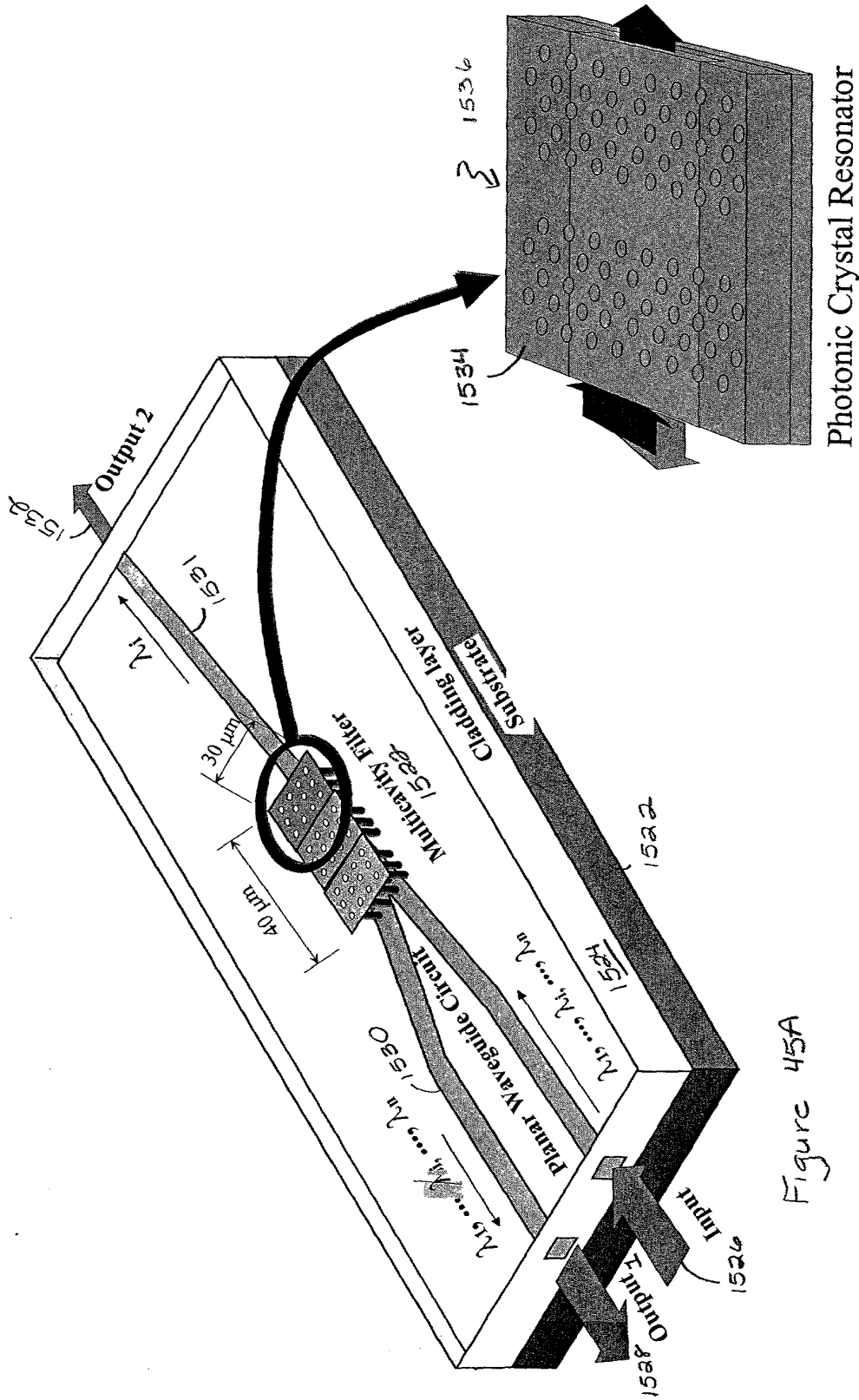


Figure 45A

Figure 45B

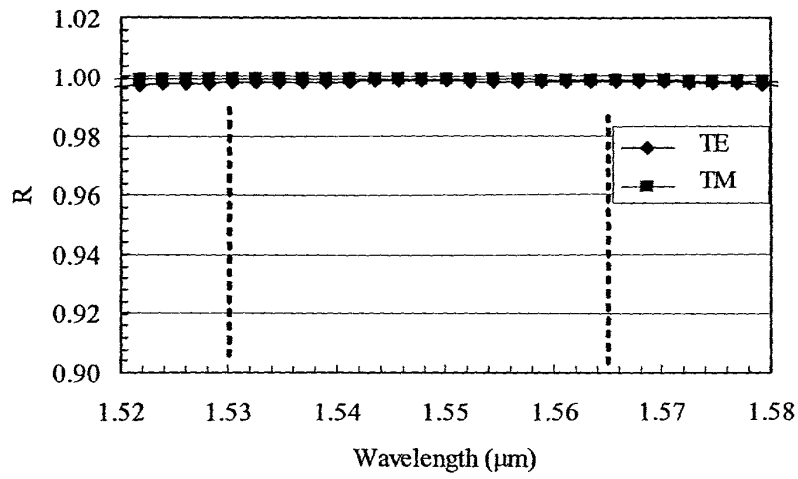
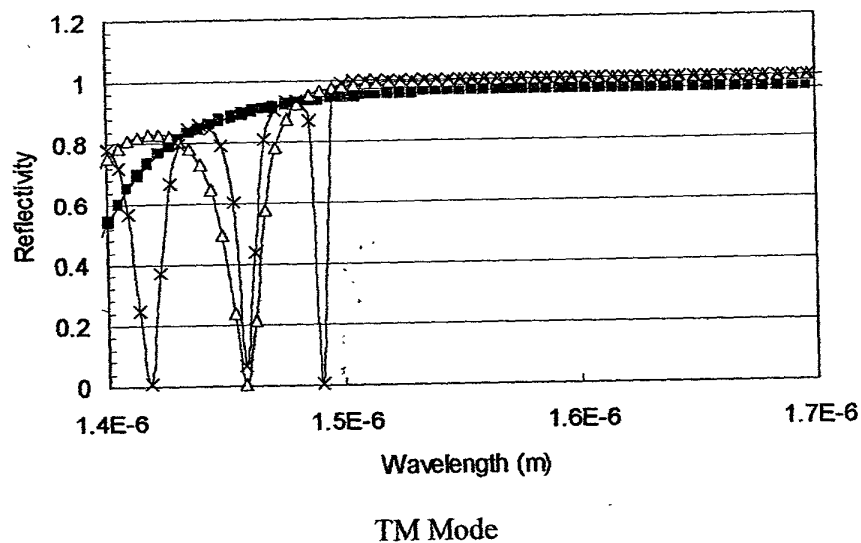
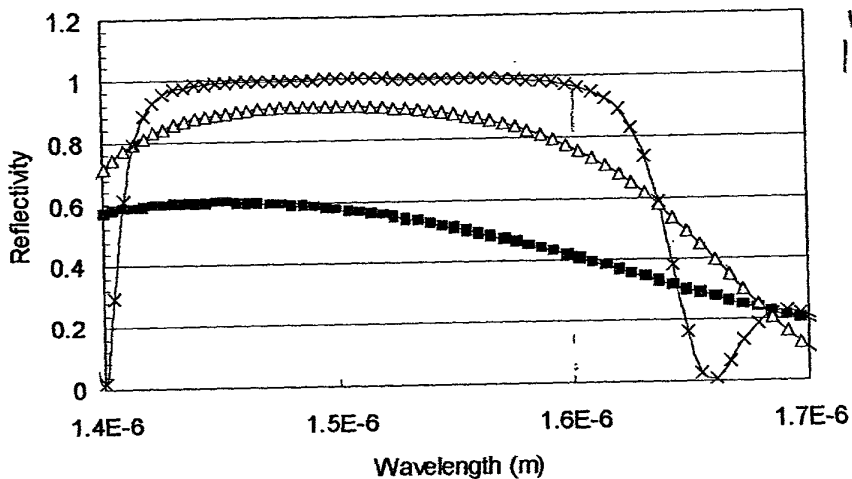


Figure 45C



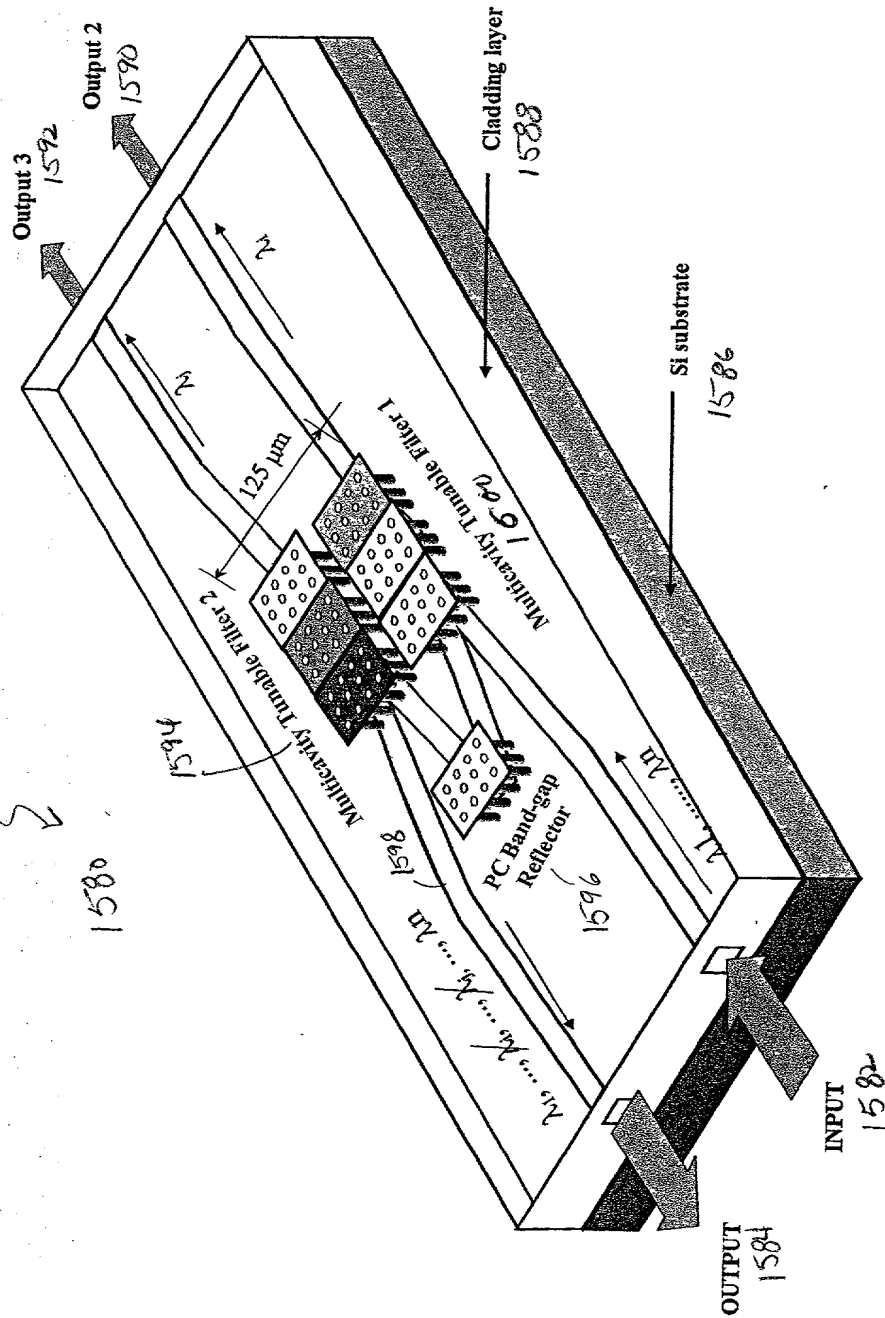


Figure 47

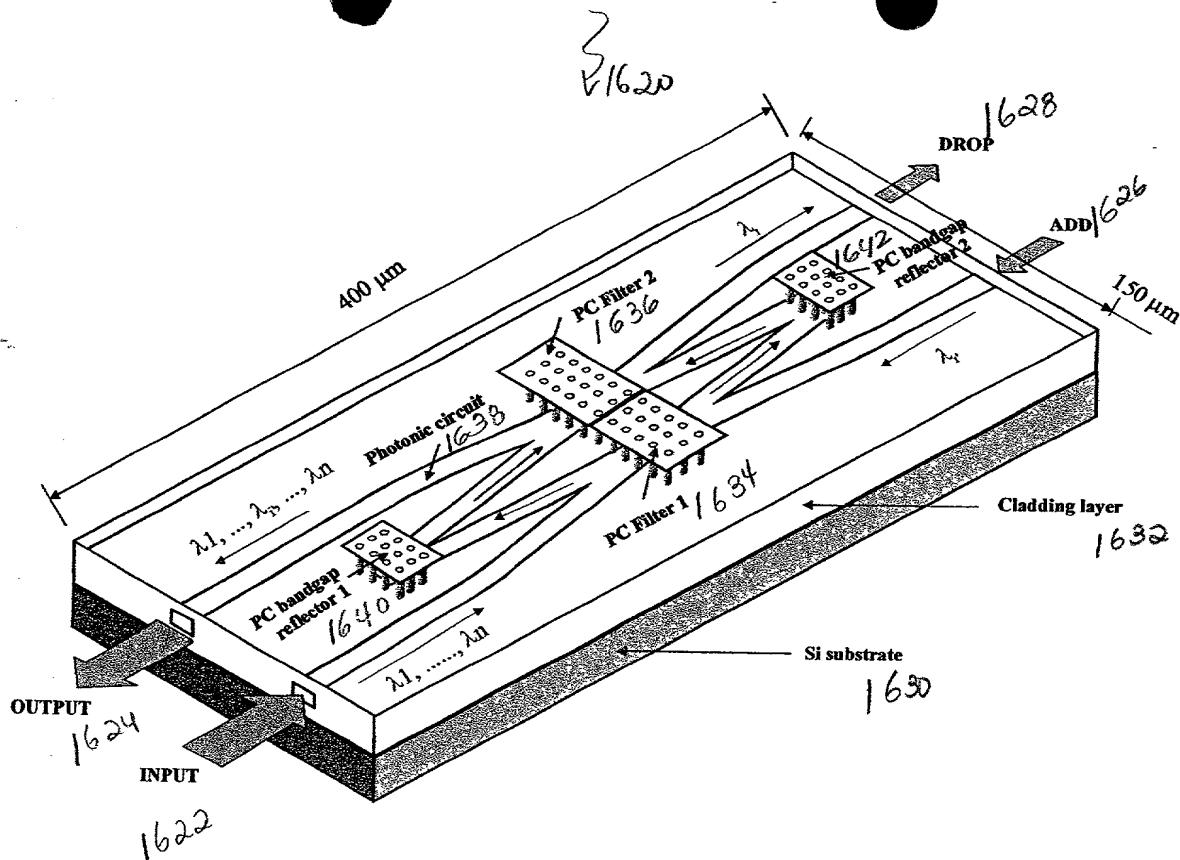


Figure 48 A

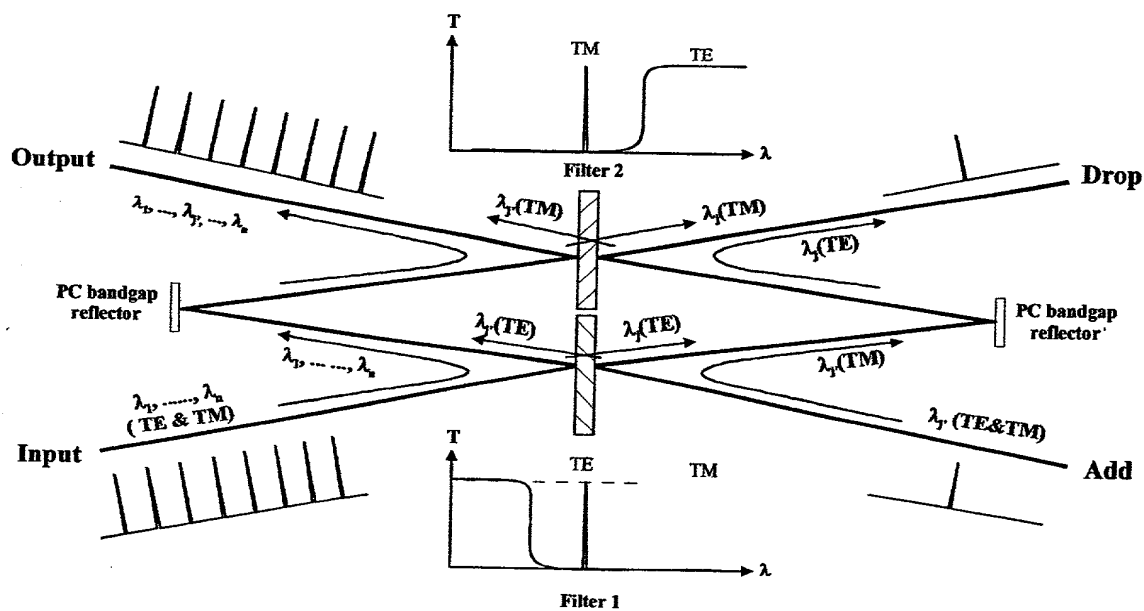


Figure 48 B

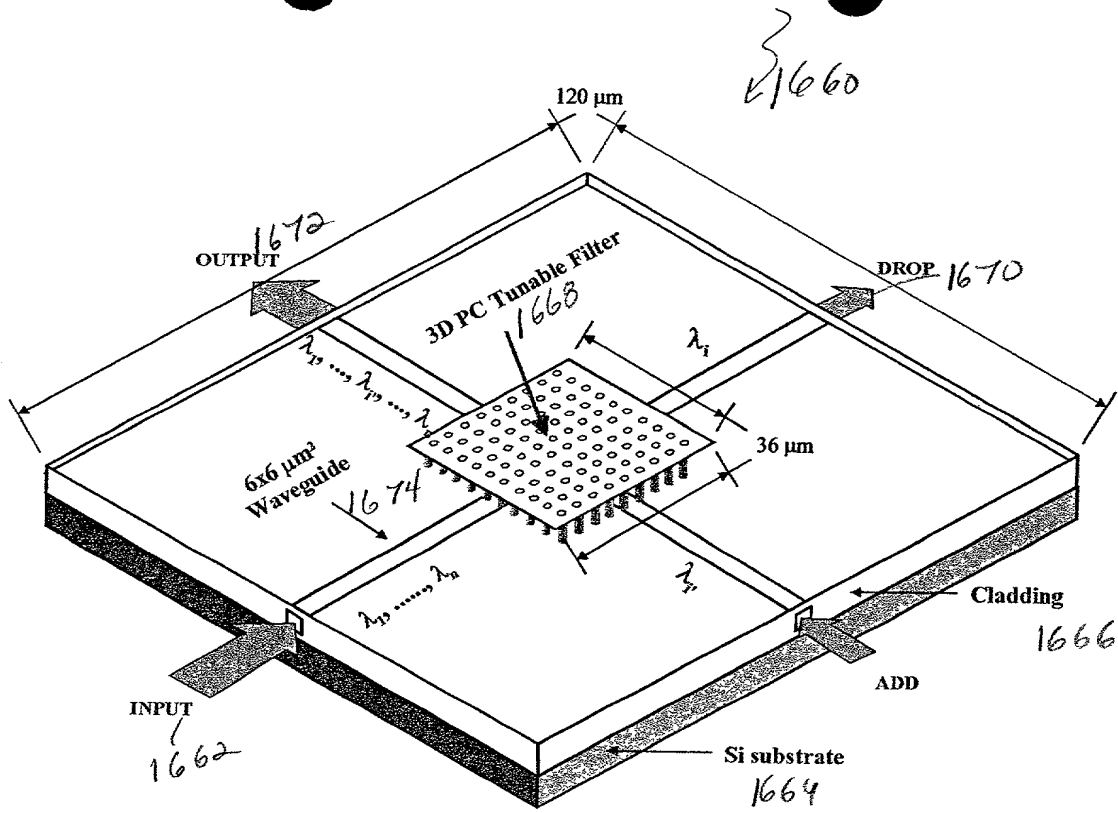


Figure 49A

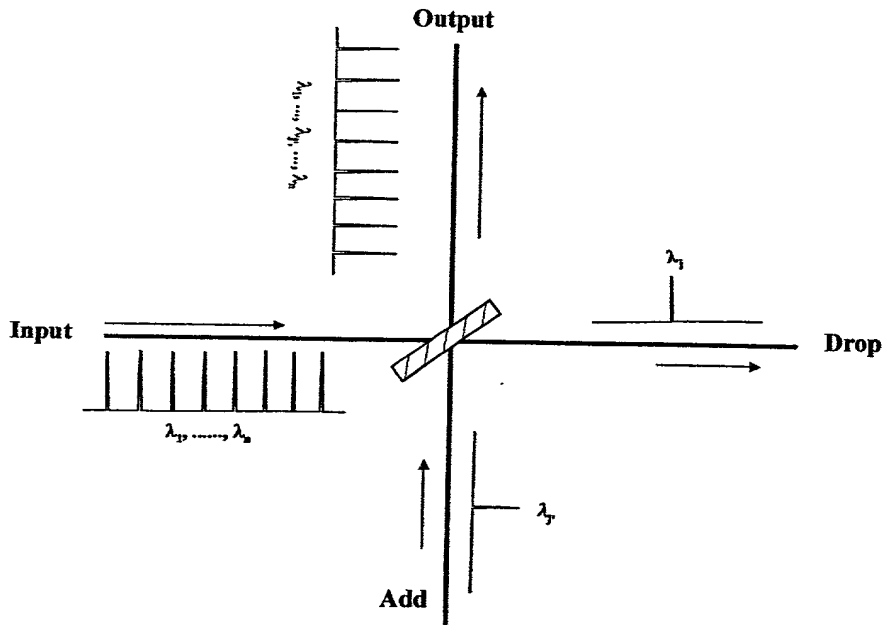


Figure 49B

1680

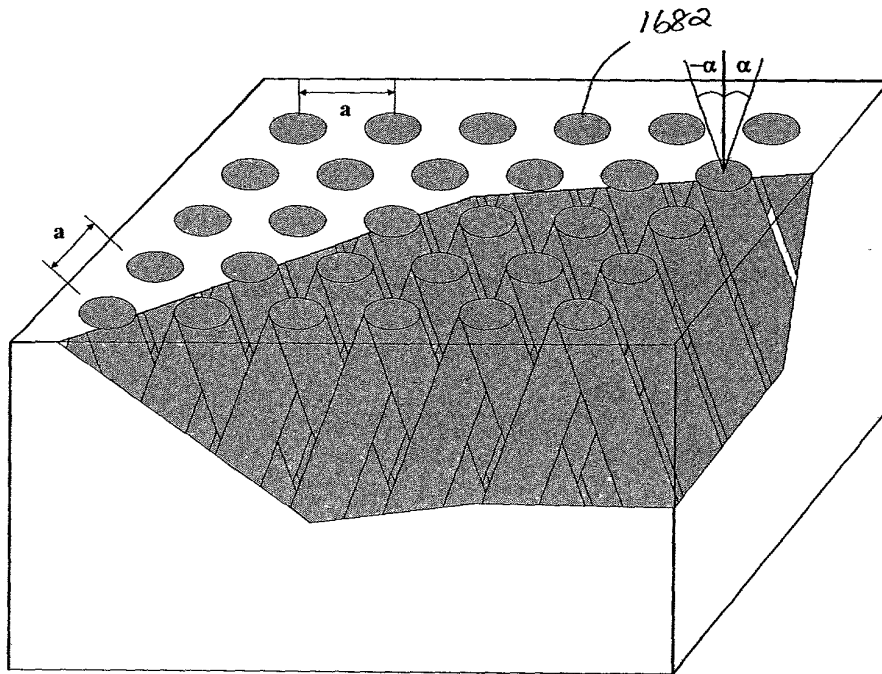


Figure 49C

1690

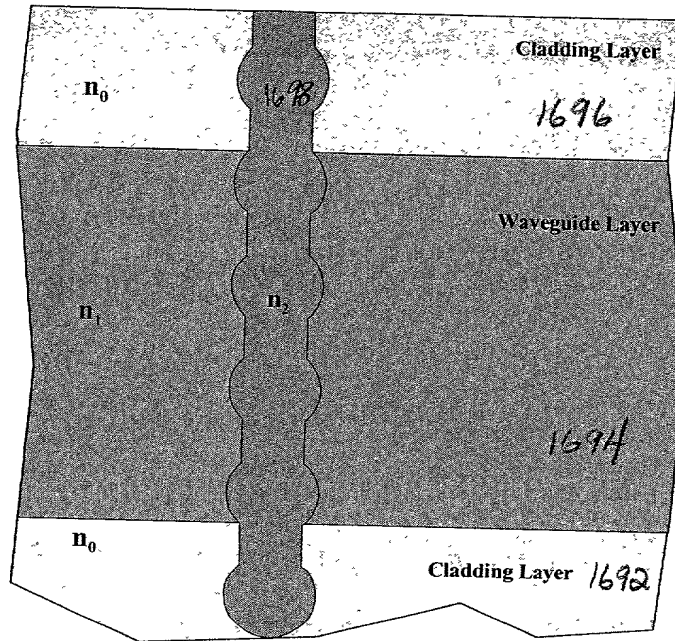


Figure 49D

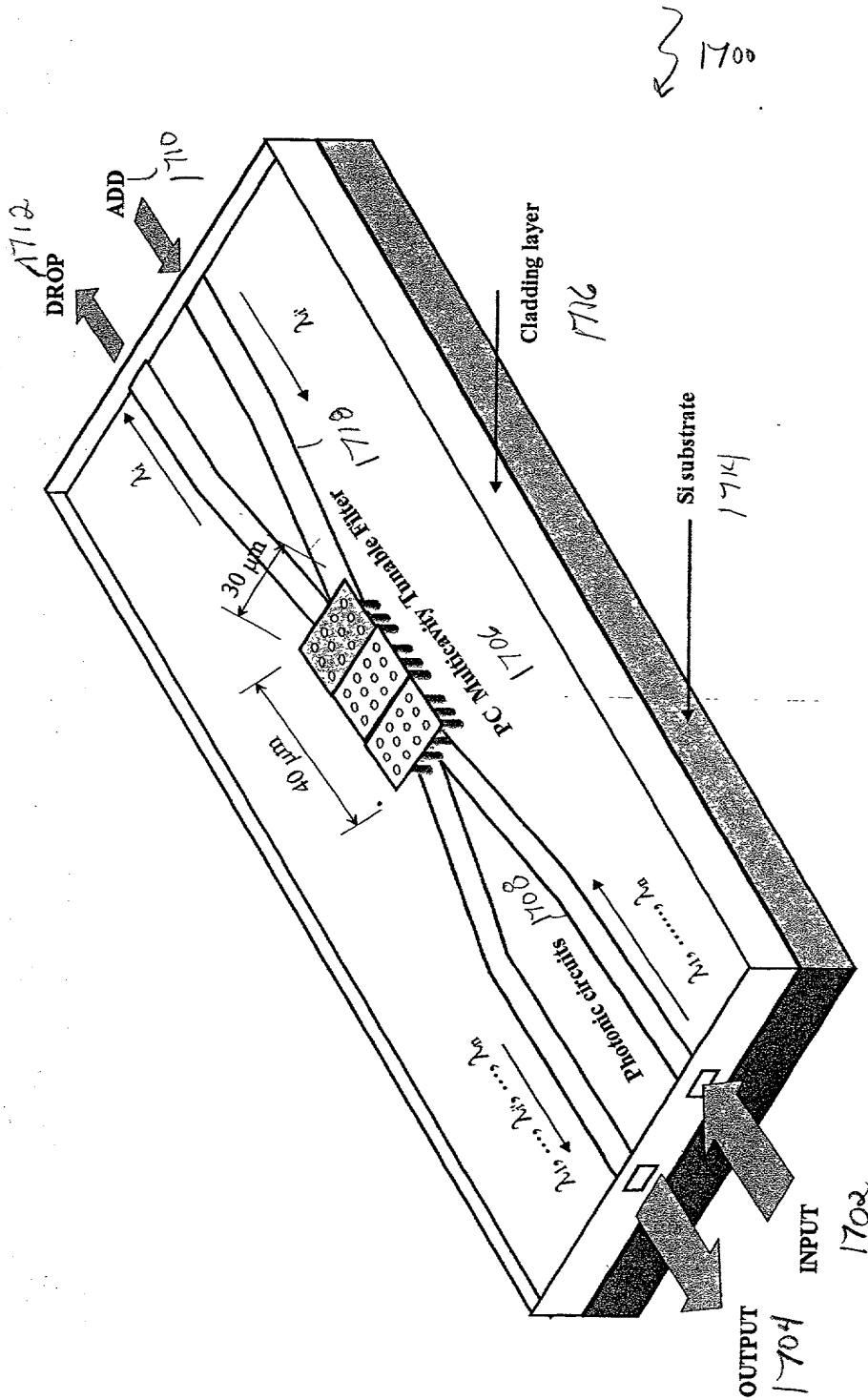
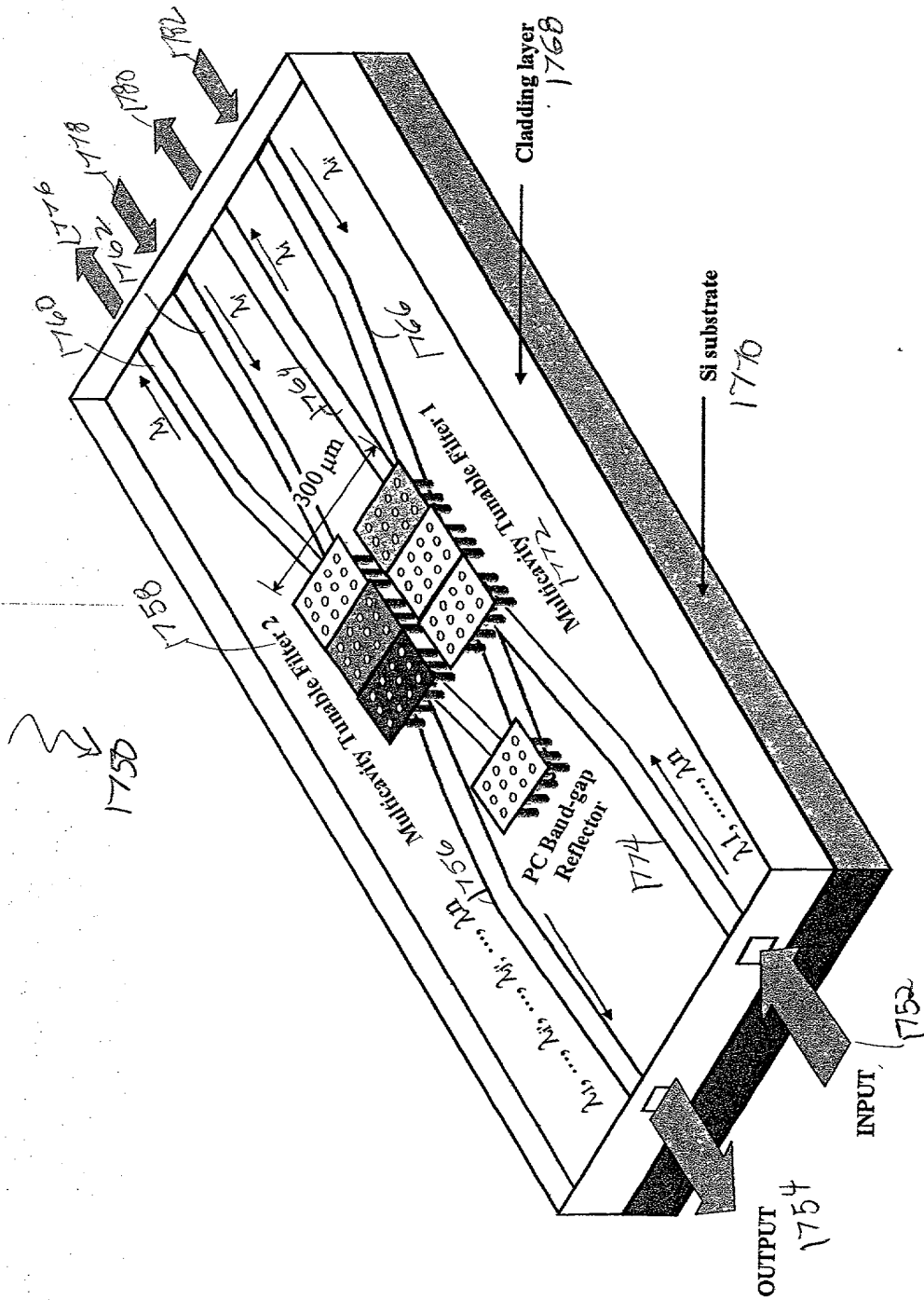


Figure 50



Dual-Wavelength Dynamic OADM

Figure 57

1800
 3

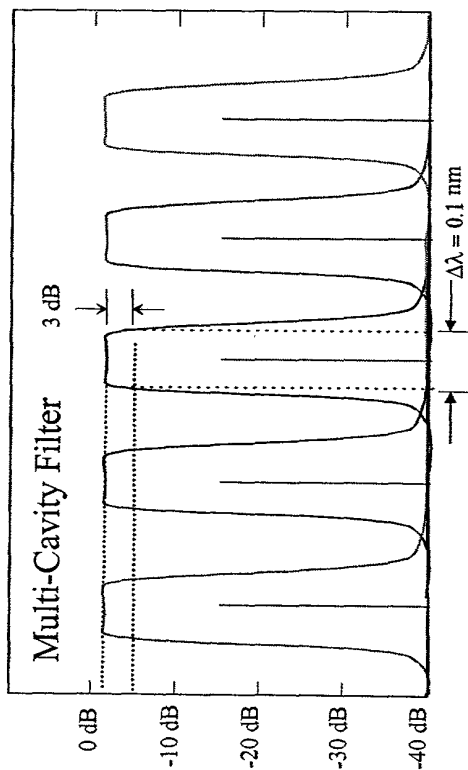


Figure 52A

1810
 3

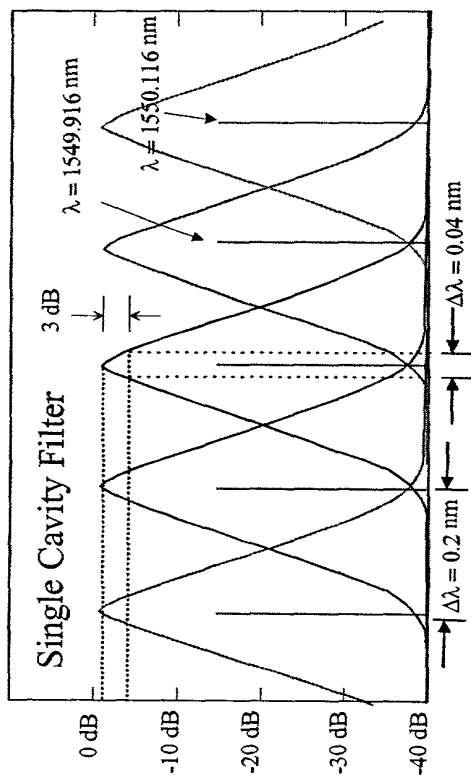
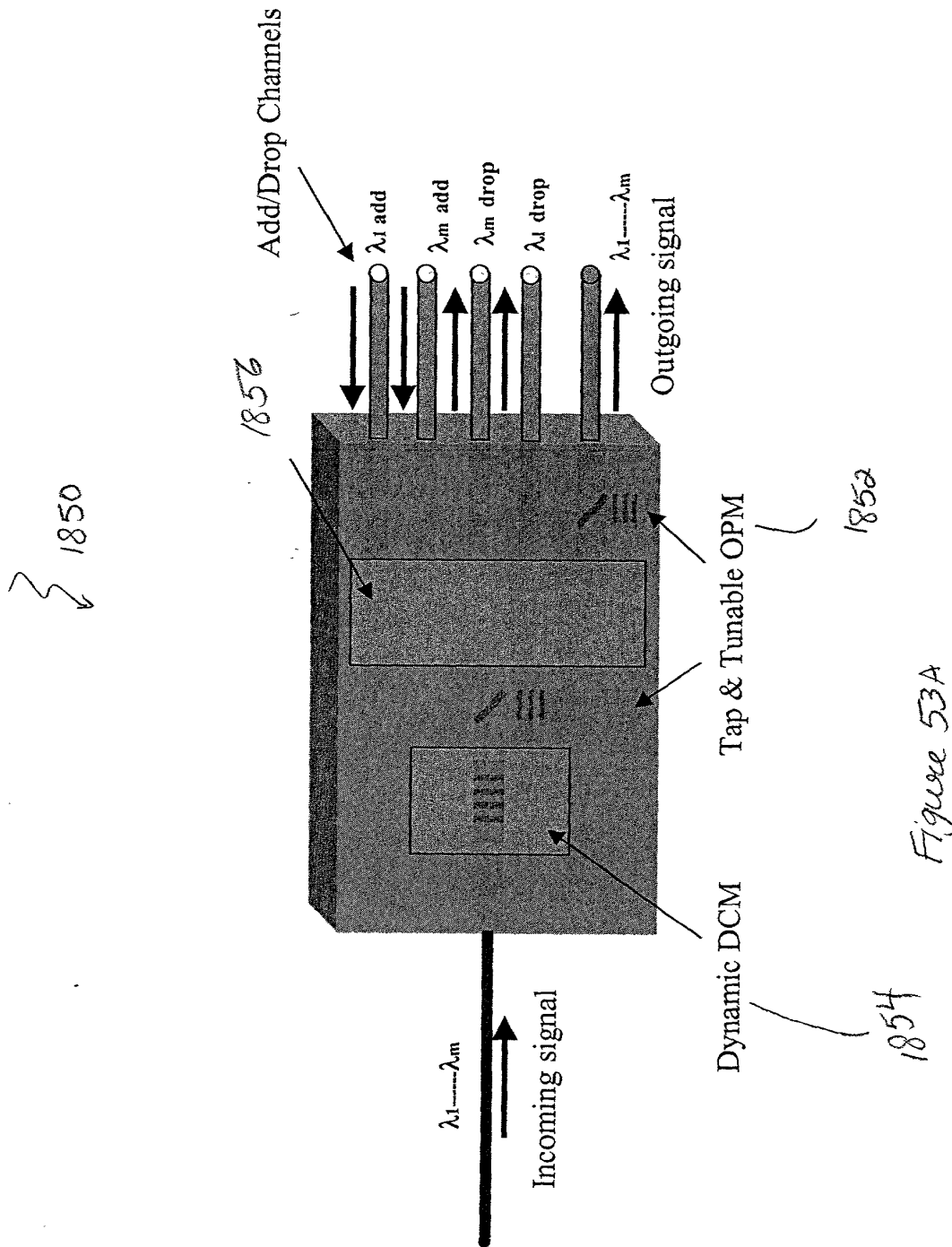


Figure 52B



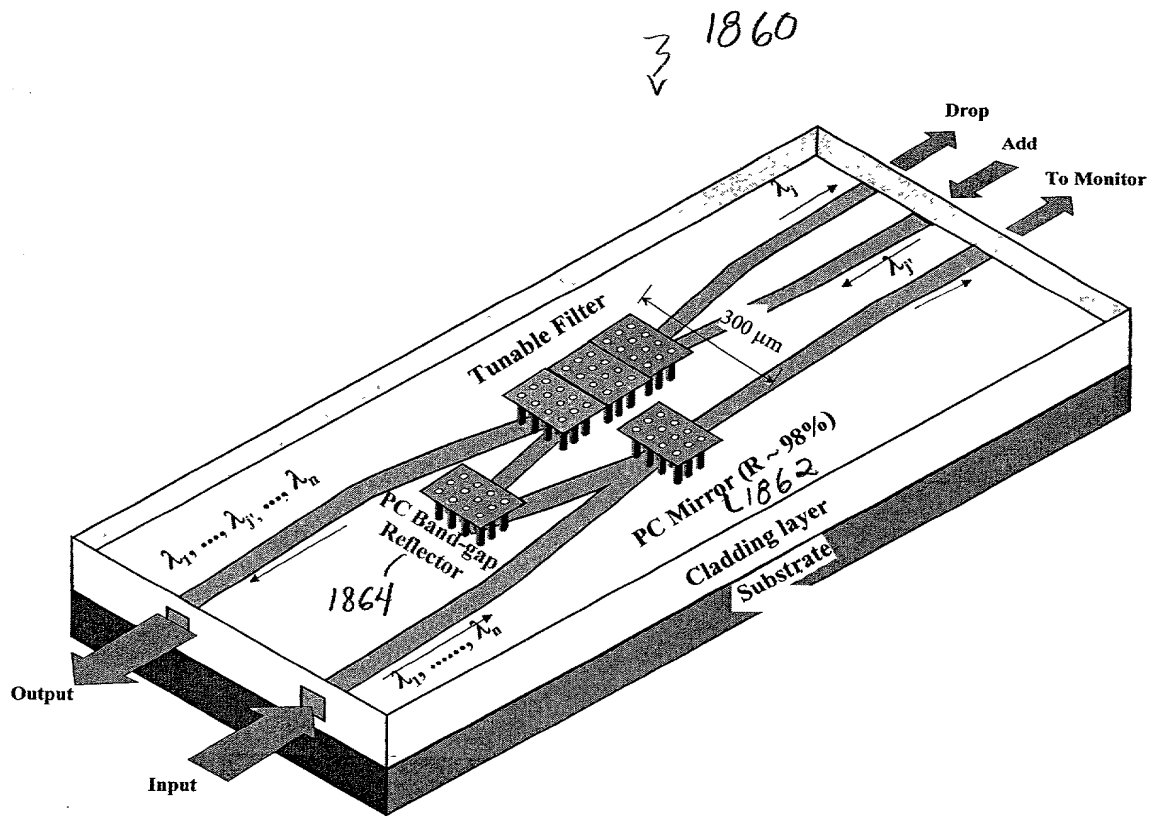


Figure 53B

1880

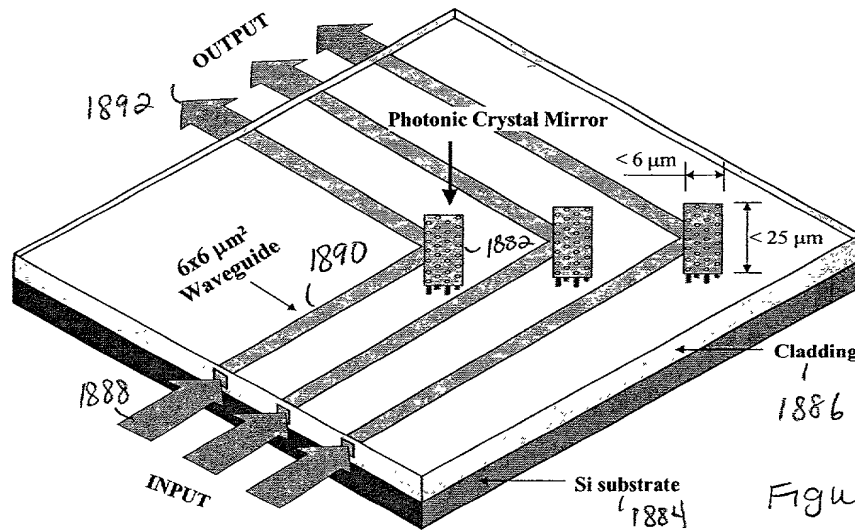
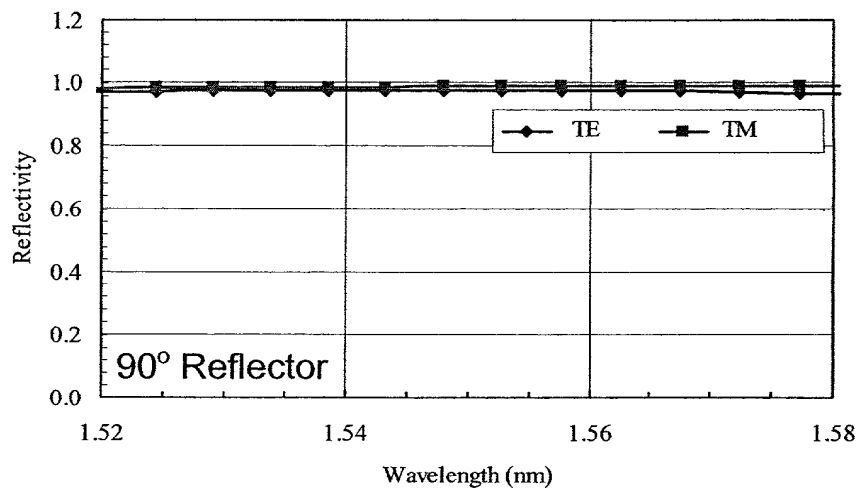


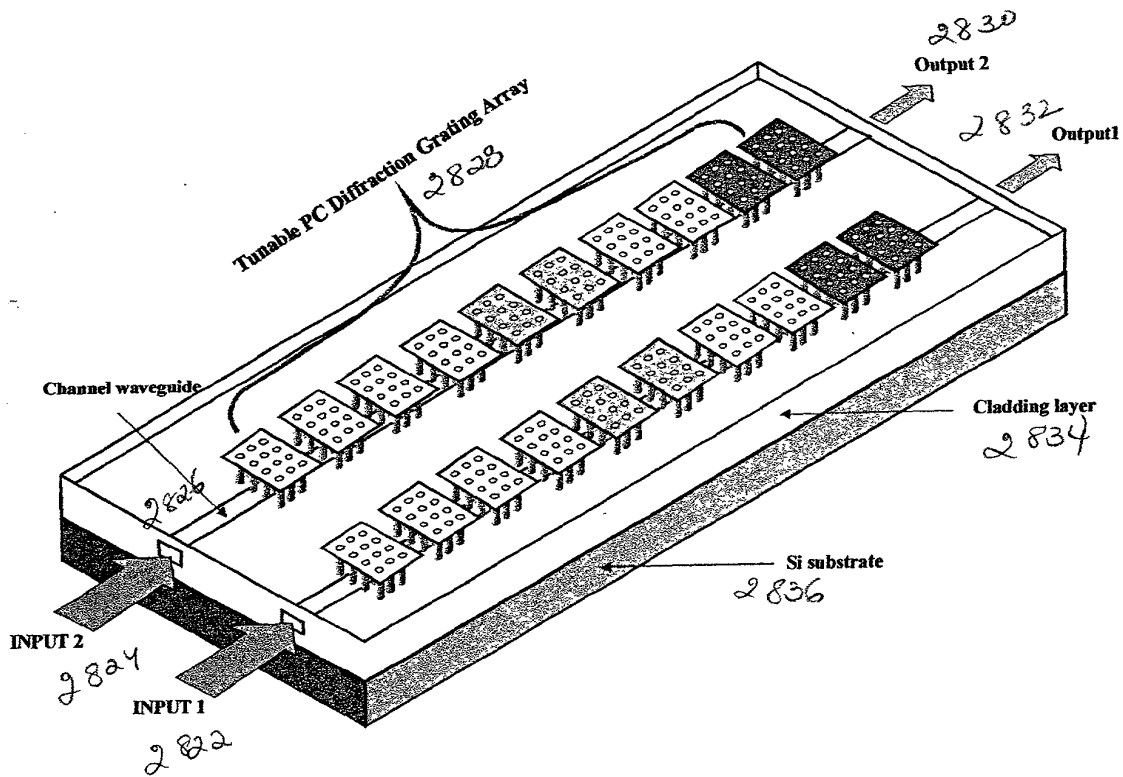
Figure 54A



1896

Figure 54B

32820



Variable Optic Attenuation/Spectral Equalizer Array

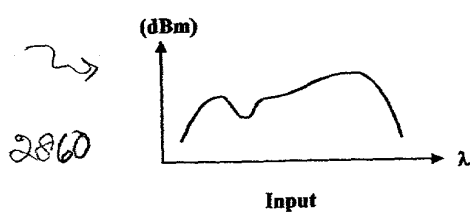
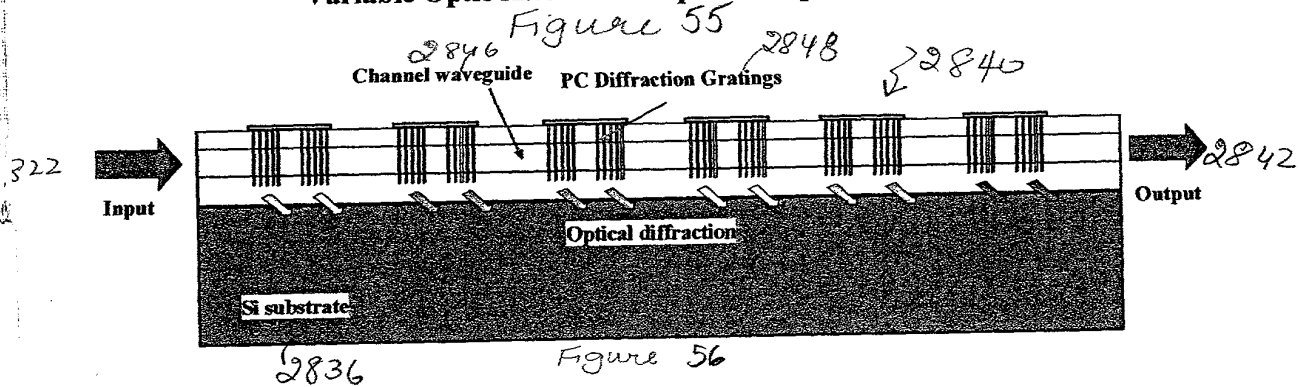


Figure 57A

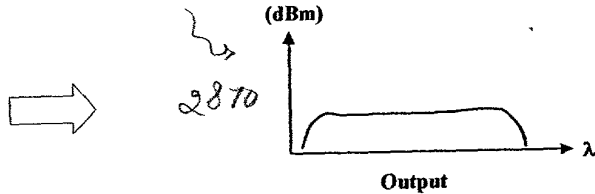


Figure 57B

Spectral Equalizer Array

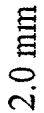


Figure 58

3000

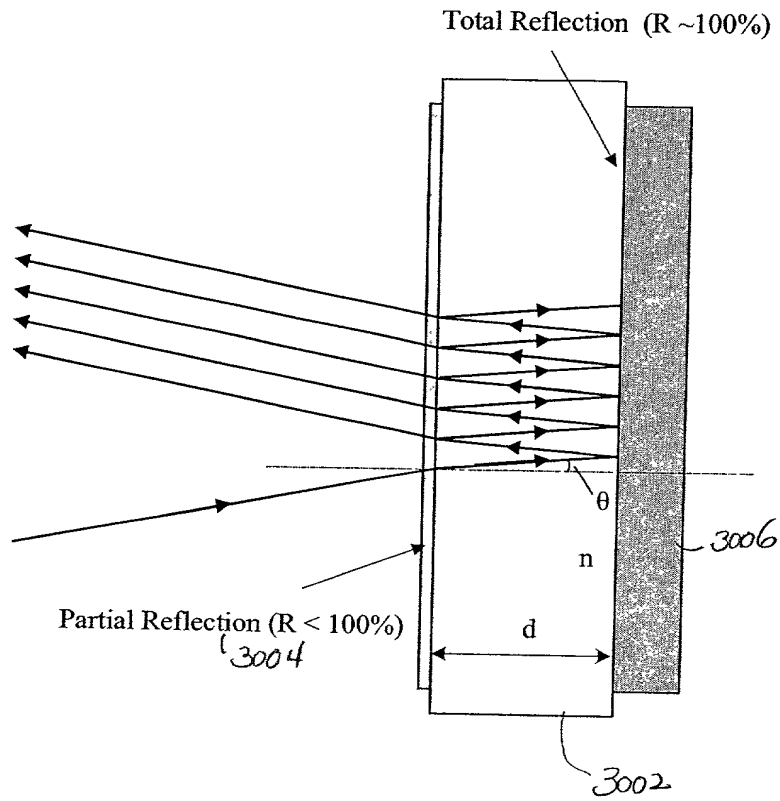


Figure 59

3200
↙

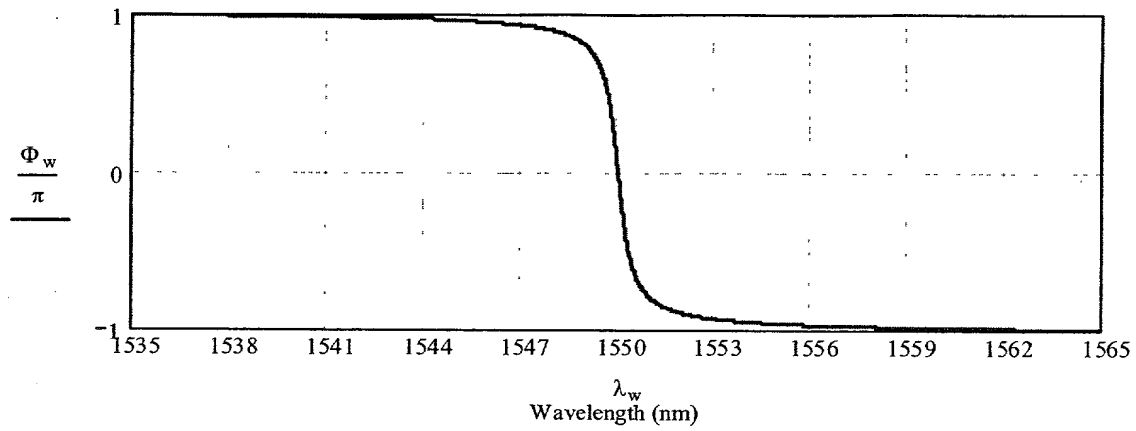


Figure 60

} 3300

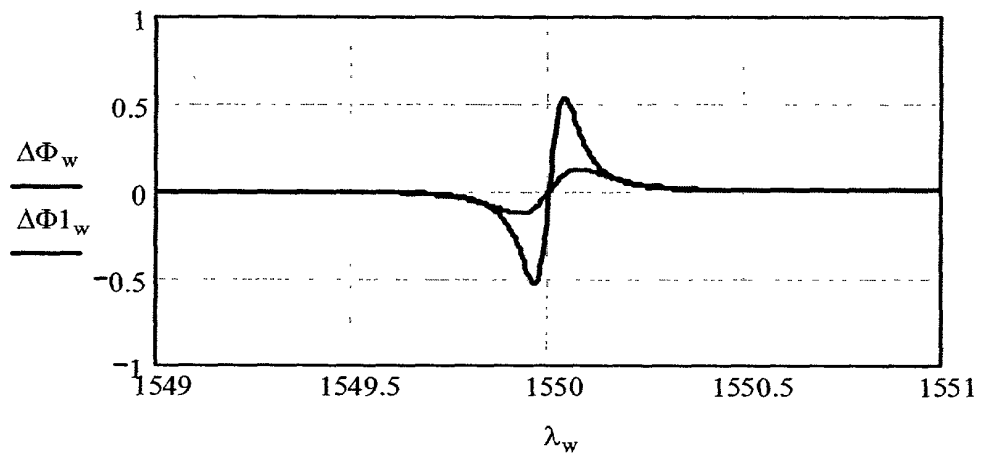


Figure 61

3400

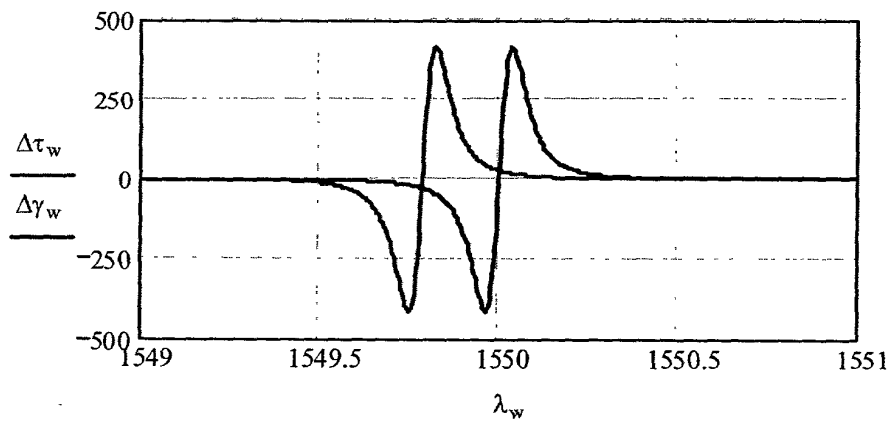


Figure 62